PERSONNEL

IN THIS ISSUE

AMERICAN MANAGEMENT ASSOCIATION

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Personnel

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.....Strictly personnel

Needed: Statesmen in Labor

"Because the labor group by far outnumbers any other group, in the long run we will have pretty much the kind of government and the kind of society that labor decrees," Walter H. Wheeler, Jr., president of Pitney-Bowes, Inc., recently told the sixty-third annual convention of the Massachusetts Federation of Labor.

"Our future from here on out," the postage meter company executive told the union delegates, "is much more dependent upon the development of statesmanlike leadership in labor than in management. In the years ahead, labor's responsibility will be tremendous."

In pointing out what he believed were the difficulties which must be faced, Wheeler cited the experiences of the British Labor Government, which is "telling British Labor about the one and only thing which will improve the lot of the British people—to produce more, to work harder with better tools and methods." The British are learning, he said, "the basic truth that no one will ever work as hard for government, or under government limitations, as he works freely for himself. They are experiencing a lassitude . . . which comes from the substitution of too much security for opportunity."

"There is a law of diminishing returns on security," Wheeler said. "We can reach a point in our thinking about security where we'll get less by trying to assure more." There is no such thing as "complete security," he said, "nor do I believe I want it. It's always well to leave just a little room for a burr in the seat of the pants—even for managements. . . . My security should depend on whether I do a good job, and so, I believe, should yours."

Wheeler conceded that management had learned a lot "the hard way, through our mistakes and your (labor's) efforts" during the last 15 years. "No one subject," he said, "is receiving more of management's attention today than that of good industrial relations. We are really beginning to recognize that our principal assets are our employees."

And yet, he said, "too large a segment of management, in my opinion, still fails to recognize the effort we can and must make to smooth out the cyclical ups and downs of business activity and employment. Too many of us still fail to recognize that . . . we have a responsibility even greater than the one to our stockholders, customers and employees. We have a public responsibility, on a local, national and world-wide scale—a responsibility to so conduct our businesses that they will give satisfaction to *all* people. Unless we recognize this fact, business as we know it will not survive. . . . Too few of us have exercised restraint on prices and profits during the recent period of postwar inflation, a period when the policing effect of competition was largely absent."

On the other hand, the industrialist said he was "happy to see the AFL helping to toss overboard the notion that all profits are inherently evil. Profits are probably the most socially useful thing we have ever had," he declared. "Their existence during the last hundred years has provided us with the good things that make us the most fortunate people on this earth."

Wheeler urged the union leaders to re-examine some of labor's historical terminology — "labor-baiter," "sweat shop," "speed up," "Slave Labor Bill," and the like. "In most cases today they are more emotional than accurate," he said, and "they interfere tremendously with labor-management harmony."

He criticized both management and labor leaders who show symptoms of "communist poisoning" by appearing to believe in the inevitability of class struggle, and by the view that "man is strictly an economic animal."

"American labor has come of age," Wheeler concluded. "It will be the most powerful political element in our society of the future. The exercising of power is a hard job. There are no easy answers. But I am confident they will be found. I look to the type of leadership you represent to help find them."

☆

"What's News"—A Guide for Plant Reporters

Many editors of employee magazines regularly exhort their readers to contribute news items and pictures, only to find themselves later blanketed under a raft of stale jokes, family portraits, handshake poses, etc. It then becomes their problem to

decide whether to disappoint aspiring reporters or print their contributions and risk plunging the publication into ignominy. Experience has shown that the best way to avoid this dilemma is for house organ editors to depend primarily for news on a staff of field correspondents appointed from the rank and file, and to see that this field staff is given proper training and guidance.

Western Electric's excellent guide for plant reporters, *What's News—And How to Get It*, goes far to solve the editor's problems. It tackles the "no-news" dilemma by priming plant reporters on where and how to find and develop news stories that might otherwise go unnoticed; equally or more important, it is a primer on basic journalistic techniques for handling news with a professional touch.

This unusually well-written handbook is, in itself, a good example of clear, forceful, and at times amusing handling of copy, illustrative quotations, and pictures. The opening chapters on the plant reporter's job and the fundamentals of good news writing are followed by several highly readable and informative sections on writing straight news, features, shorts and personals, and telling the news in pictures. Everything the reporter needs to know about preparing manuscripts, conforming with editorial style, meeting deadlines, and observing editorial policy is spelled out.

Readers of PERSONNEL who desire copies of this manual should address their requests to Editorial Director, Personnel Division, Western Electric Company, 233 Broadway, New York 7, N. Y.

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General Foods Cited for Human Relations Program

A progressive personnel training program, stressing intelligent human relations in supervision, has won for General Foods Corporation the third annual Distinguished Service Award of the Special Devices Association. The association's membership consists of Naval Reserve officers and civilians who have served or are serving in the Navy's Special Devices Center, and its annual awards are made for outstanding accomplishment in rapid learning techniques and mass training during and since the war.

Cited by the association were General Foods' printed policy statement of employee relations issued by top management and known as the "little yellow book," inclusion of human relations training in both sales and plant supervisory training programs, corporate recognition of the vital importance of intelligent personnel administration at the places where people work, a personnel code providing complete procedure for the General Foods personnel administration program, and progressive use of the best training methods and devices in both sales and plant training programs.

The certificate is the only training award given by any professional society in the United States. Previous winners were the American Telephone and Telegraph Company and General Motors Corporation.

☆

Survey Reveals Broad Scope of Voluntary Employee Benefits

While Washington continues to discuss the extension of compulsory social security, a Chicago research organization, the Research Council for Economic Security, has been at work finding out how much *voluntary* protection exists in American industry. Its findings, based on an extensive survey, indicate that voluntary employee benefit plans have attained such scope and coverage as to constitute a major factor in the American economy.

The questionnaire survey, covering 3,965 firms employing 1,960,773 employees in six metropolitan areas (Chicago, St. Louis, Pittsburgh, Twin Cities, Detroit, and Cleveland), disclosed the following facts about voluntary employee benefits:

Over 75 per cent of all reported employees have life insurance; over 70 per cent are covered by prepaid hospitalization plans; almost 50 per cent by surgical benefits; and less than 7 per cent by prepaid medical care, a more recent development among industrial group welfare programs.

Over 60 per cent of the reported employees are under disability compensation programs, either the informal type of paid sick leave or an organized cash sickness plan. About 40 per cent are enrolled in pension or retirement systems.

Of the total number of non-agricultural workers in the country, about 32 per cent are employed in the midwest region. The above percentages pertain to approximately 15 per cent of that group.

The handling of the plans differs with their character. In general, insurance companies play a major role as carriers, although Blue Cross handles a greater number of hospitalization plans, and many pension and retirement systems are administered by trust companies. Employee bene-

fit associations, labor unions, and the companies themselves frequently serve as carriers.

Financing is largely borne by the employer, the common practice being for him to pay over 50 per cent of the cost, except in the case of prepaid hospitalization where the employee pays the entire cost in 57.2 per cent of all reported plans.

Large firms with 500 or more employees are twice as likely to have employee benefit plans as those with less than 100 employees. Among the various industry groups, finance, manufacturing, and transportation reported a higher prevalence of plans.

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Placement Group Serves Both Parties Without Fees

OF more than passing interest to placement managers and jobseekers alike is the work of the Occupational Research Foundation, a philanthropic personnel service founded, supported, and used by business managements to recruit highly competent executive, executive-trainee, and professional-level personnel. Charging no fee to either employers or jobseekers, the Foundation's services are available to any firm. Some 250 companies, reading like a Who's Who of American Business, regularly utilize the service, now in its third year of operation. Among these concerns are A.T. &T., American Tobacco, Borden's, Dow-Jones, Sears, Roebuck & Co., Time, Inc., The Prudential Insurance Co., and many others. Altogether, 34 fields of business are represented among the firms using the Foundation's services.

O.R.F.'s activities are twofold: It researches employment trends and analyzes job classifications to determine what caliber person will best fill a particular job category, such as advertising manager, industrial relations director, etc. Second, the Foundation does a thorough and extremely personalized job of processing highly select jobseekers on the college graduate or experienced executive level and guiding those it finds properly qualified for the jobs they are seeking.

When a firm requests applicants to fill an opening, candidates are screened and the cream of the specifically qualified crop is made available to the company for interviews. This of course relieves a personnel department of the time-consuming and costly work of processing scores of dubiously qualified applicants responding to an advertisement, and it does so without fee or obligation to either party.

The Foundation's headquarters are located at 453 Madison Avenue, New York 22, N. Y.

☆

Training Program for Shop Stewards

A novel arrangement for training shop stewards was worked out recently by union machinists, ironworkers, and electricians in the Deepfreeze division of Motor Products Corporation, North Chicago, Illinois, with the full cooperation of the company's management. The training program consisted of a nine-week "grievance clinic" sponsored by the unions and conducted by the University of Illinois Division of University Extension and Institute of Labor and Industrial Relations.

Management agreed to allow the stewards one-half hour from work one day each week to attend classes in a company conference room. The remainder of the class was on the stewards' own time.

Class discussions centered on the procedures for handling worker grievances under the labor-management agreement. Techniques for preventing grievances and for meeting the human relations problems which confront stewards in the shop situation were emphasized. Work grievances, acted out by class members, and film strips lent variety to the meetings.

☆

● "The Human Factor in Working Relations," a seminar on the psychoanalytic aspects of personnel problems, will be given this fall by Dr. Sara Breitbart at the New School for Social Research in collaboration with the American Institute for Psychoanalysis. The aims of the seminar are to present a psychoanalytic theory of human motivation, with emphasis on its expression in the work situation; to discuss attitudes to work itself and inhibitions and satisfactions in this phase of life; to examine the relationships between fellow-workers and subordinates; and to evaluate current interviewing and placement methods, plans and systems for increasing worker incentive and productivity, etc. Case material will be offered by the participants in the seminar for study in the light of the principles presented.

The seminar, which will consist of 15 weekly lectures on Thursdays at 8:30 p. m., will begin on September 29. The tuition fee is $30. Registrations or requests for further information should be addressed to Miss Janet Frey, Registrar, American Institute for Psychoanalysis, 220 West 98th Street, New York 25, N. Y.

"MANAGEMENT APPRENTICESHIPS"

An Executive Development Program

By A. V. FEIGENBAUM
and
H. W. TULLOCH
General Electric Company
Schenectady, New York

Just as leadership is a personal art, training for leadership can best be imparted on a personal basis. This is the guiding concept behind GE's highly successful Manufacturing Leadership Program, whereby management trainees are apprenticed to experienced manufacturing executives in a succession of increasingly responsible assignments, supported by classroom work, periodic counseling, and other aids to their development. This article, which is adapted from a paper delivered before the American Society of Mechanical Engineers, describes the complete training process, from the selection of potential managers through their ultimate placement in responsible manufacturing management posts.

A DISTINGUISHED educator recently summarized his viewpoint toward the educational process: "Effective education may be described as a man and a boy, walking along a road, talking together in a friendly atmosphere."

This peculiarly personal nature of successful education has long been recognized in the General Electric Company. It has been emphasized in its long-established Sales Training Program, as well as in its Advanced Engineering Program [1] and its Creative Engineering Program. [2]

In the field of training for manufacturing management, experience has indicated that effective educational programs must be established on a personal basis. Leadership skills have been most readily developed by those who have had the good fortune in their careers to work under the guidance of seasoned, successful managers of men.

This situation is recognized by the Apparatus Department of General Electric in its Manufacturing Leadership Program. The core of this pattern of planned leadership development is the "personal apprenticeship" of young men, selected for their administrative potential, to experienced manufacturing executives.

The program also includes training of the young men in modern manufacturing techniques, and their rotation among several different manufacturing responsibilities. An over-all picture of the entire scope of product manufacturing is fostered, since men are being developed for major manufacturing positions.

Apparatus Manufacturing has recognized in its program the wide variety of managerial "styles" among executives. Two equally successful administrators may vary widely in their individual personalities, backgrounds, and interests. So the Manufacturing Leadership Program—or "Management Apprenticeships" as it is frequently called—is tailored to fit the individual

[1] "An Advanced Course in Engineering," by A. R. Stevenson, Jr. and Alan Howard. *Electrical Engineering*, vol. 54, 1935. pp. 265-266.
[2] "Developing Creative Engineers," by J. F. Young. *Mechanical Engineering*, vol. 67, 1945. pp. 843-846.

needs of trainees. Standardization of assignments is carefully avoided. Trainees participate directly in the formulation of their training schedule and assignments.

Organization of the program is based on the fact that the most effective point at which management development can take place is between a trainee and the experienced executive who is his superior. Training is an important part of the function of the line organization, and the primary training job is carried on by the line. Staff activity in management training is designed to assist the line in carrying on this program, to coordinate the program, and to stimulate an awareness of the importance of this training at all levels of manufacturing management.

SCOPE OF THE TRAINING PROGRAM

A young man selected for the Manufacturing Leadership Program has three opportunities open to him: He may be trained in General Manufacturing, in Production Control, or in Methods, Planning and Wage Rate. Whichever of these options he chooses, the young man will enter a program of training that concentrates upon his personal development as an individual, rather than upon his indoctrination in narrow trade skills.

This personal development is gained by assigning the trainee a series of increasingly important manufacturing responsibilities; it is gained by his expressing his ideas at many conferences and group meetings; it is gained by his being periodically counseled by experienced managers. Classroom courses are used as one of the means for making information available to the trainee. But classroom courses are merely a part of the program for developing manufacturing leadership—they are not the whole program.

The Manufacturing Leadership Program has two definite steps. Chart I illustrates these steps in the three options available. Step 1 involves broad training which concentrates upon the trainees' learning manufacturing fundamentals at one works or one plant of the General Electric Company. All Management Apprentices go through Step 1. Men who perform satisfactorily during this training are assigned to responsible posts in manufacturing management.

Those who have shown unusual potential for manufacturing leadership, and who have demonstrated that they will benefit from additional training, are selected for Step 2 of Management Apprenticeships. This training concentrates upon rotation among two or three plants of the General Electric Company. The trainee is made responsible for several important manufacturing management projects during this phase of his training.

ADMINISTRATIVE FUNDAMENTALS OF THE PROGRAM

It may be of interest to review some of the administrative fundamentals associated with the Management Apprenticeship Program.

Personnel Audit. The proper number of men to be chosen for participation in this program is most effectively determined by a "personnel audit." This audit simmers down to an analysis of the next several years' requirements for men to fill manufacturing management posts created by

MANUFACTURING LEADERSHIP PROGRAM

("MANAGEMENT APPRENTICESHIPS")

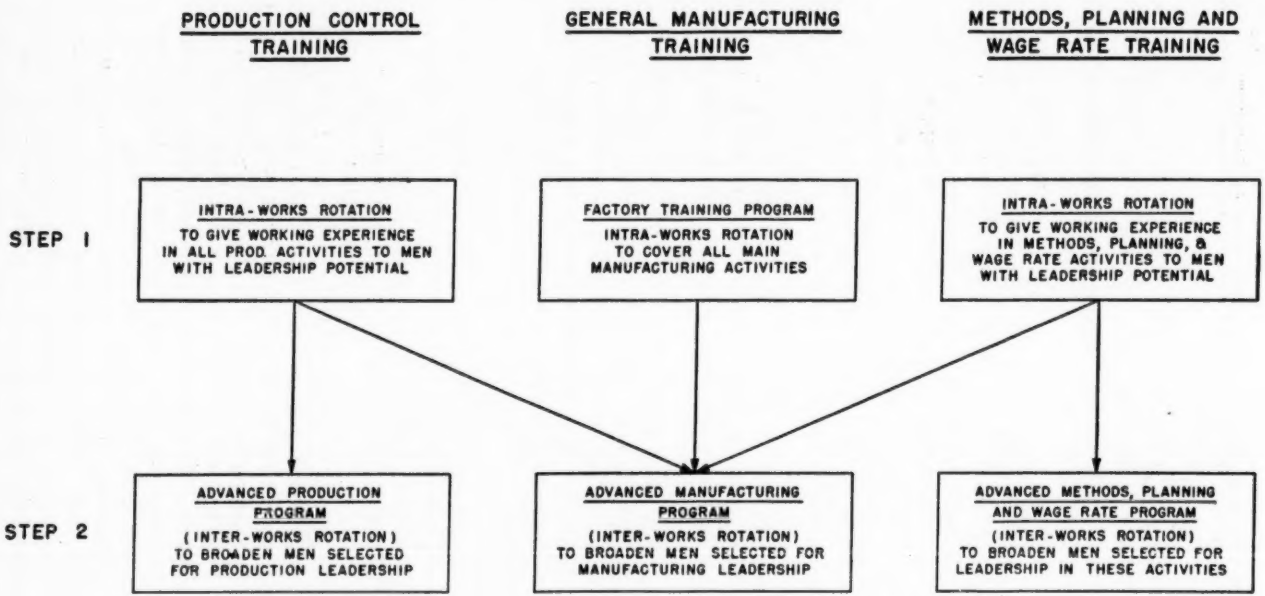
PRODUCTION CONTROL TRAINING
GENERAL MANUFACTURING TRAINING
METHODS, PLANNING AND WAGE RATE TRAINING
STEP 1
INTRA-WORKS ROTATION
TO GIVE WORKING EXPERIENCE IN ALL PROD. ACTIVITIES TO MEN WITH LEADERSHIP POTENTIAL
FACTORY TRAINING PROGRAM
INTRA-WORKS ROTATION TO COVER ALL MAIN MANUFACTURING ACTIVITIES
INTRA-WORKS ROTATION
TO GIVE WORKING EXPERIENCE IN METHODS, PLANNING, & WAGE RATE ACTIVITIES TO MEN WITH LEADERSHIP POTENTIAL
STEP 2
ADVANCED PRODUCTION PROGRAM
(INTER-WORKS ROTATION) TO BROADEN MEN SELECTED FOR PRODUCTION LEADERSHIP
ADVANCED MANUFACTURING PROGRAM
(INTER-WORKS ROTATION) TO BROADEN MEN SELECTED FOR MANUFACTURING LEADERSHIP
ADVANCED METHODS, PLANNING AND WAGE RATE PROGRAM
(INTER-WORKS ROTATION) TO BROADEN MEN SELECTED FOR LEADERSHIP IN THESE ACTIVITIES

Chart I

retirements, promotions and expansion. When this number of men has been decided upon, the total number is translated into yearly quotas. These quotas are then used as the basis for the selection of trainees.

Selection. Selection of men to fill these quotas is based upon several factors. The record of the men in their previous work with the company is carefully analyzed to determine their potential for leadership. Men who seem to have the proper potential are recommended from both the line and the staff organizations. They are then individually interviewed by a number of responsible supervisors representing varied manufacturing activities.

A battery of psychological tests may also be used to throw additional light on the potential of these men. These tests include those for measuring intelligence, judgment, and vocational preference. They include such projective techniques as the Rorschach ("ink blots") and a form of the Thematic Apperception Test to assay leadership qualities. [3]

From his record, his interview results, and his tests, a comprehensive picture is available of a man's potential for administration. Selection for Management Apprenticeships is based on an appraisal of these several factors.

Sources of Trainees. Graduates of engineering colleges are among those eligible for the Manufacturing Leadership Program. These men are usually drawn from the General Electric Test Engineer Program, rather than being hired direct from college. Also eligible are graduates of the Company's Business Training Course, which is designed for business administration and liberal arts college graduates; apprentice graduates; competent, young shop employees; and any others who have good potentials. The manufacturing organization is continually surveyed for promising young men who show administrative possibilities.

The Test Program is the normal channel of entry into General Electric for engineering graduates. These graduates may have assignments ranging from the actual testing of technical apparatus to work in such manufacturing functions as Time Study, Production and Quality Control.

The Test Program introduces the engineering graduates to General Electric and acquaints them with its products. It allows them to survey the whole, broad field of opportunity before committing themselves to a specialized kind of work; it enables the company to measure their abilities and to judge their personalities; it furnishes qualified men with supervisory experience.

At the completion of this Test Engineer training, the engineering graduate chooses his assignment from the opportunities which are open. He may enter fields such as product engineering and sales, or he may join the Manufacturing Leadership Program.

A TYPICAL MANAGEMENT APPRENTICESHIP PROGRAM

The operation of the Management Apprenticeship program may be illustrated by a review of training for men who select the General Manufacturing option.

[3] Among the growing list of printed discussions describing the application of these projective techniques is: "Executive Personality and Job Success," by W. E. Henry. American Management Association, *Personnel Series No. 120*, 1948.

These men first join the Factory Training Program at one of the major General Electric Plants. This program is designed to give the trainee the benefit of acquaintance with such essential manufacturing activities as production control, labor relations, factory supervision, wage rate administration, methods and equipment planning, personnel administration, cost accounting, cost reduction and quality control.

Assignments range from the actual operation of machine tools at the start of the training program, through various line, staff, and functional activities. The trainee is always assigned definite responsibilities which he discharges under the guidance of an experienced manufacturing supervisor. Trainees may be assigned such responsible posts as that of factory foreman, assistant production supervisor, or assistant methods supervisor.

Assignments are tailor-made to the needs of each trainee. As they develop in background, trainees begin an "upward spiral" of these assignments, each one entailing more and more responsibility. Every man is closely followed on the basis of assignment sheets similar to that shown in Chart II. All trainees will not, of course, require every assignment listed.

The Factory Training Program includes a series of group meetings at which trainees meet company executives and enter discussions with them. Some classroom work is required of all students.

Men who show unusual aptitudes for manufacturing management during their Factory Training assignments may be chosen for the Advanced Manufacturing Program. Members of this program concentrate upon special projects in the field of manufacturing management. Emphasis is placed upon

Chart II

ASSIGNMENT SHEET FOR

Doe, John E.

Line Assignments	*Completed*	*Staff Assignments*	*Completed*
Machine Work	X	General Accounting	
Production Control		General Cost	
Purchasing		Labor Relations	X
Cost		Personnel	
Planning and Methods	X	Wage Rate Administration	X
Special Assignments	X	Mfg. Losses & Cost Reduction	
Foreman	X	Quality Control	X
Functional Supervisor		Plant Rearrangement	
General Foreman		Safety	
Ass't to Superintendent	X	Manager's Office	X

AVAILABLE FOR NEXT ASSIGNMENT: June, 1949

NOTE: X=Assignments men have had

manufacturing fundamentals, and classroom work is available to these men in the Apparatus Department's Advanced Manufacturing Management Classes. These classes cover such fields as industrial, economics, organization planning and administrative practices, labor relations, production and inventory control, and wage rate administration.

Recommended reading assignments and case studies are distributed for analysis at periodic group meetings held at various plant locations. Advanced Manufacturing Program trainees spend the duration of their training time—which is approximately 18 months—at two or three major Apparatus Plants.

An analogous sequence of training takes place in both the Production Control and the Methods, Planning and Wage Rate options. While the details of training in these fields differ somewhat from that in General Manufacturing, the same basic fundamentals apply.

Men in any of these three options of the Manufacturing Leadership Program are eligible for positions of responsibility in manufacturing management. The nature of their training, and the program of personal development which has been associated with this training, enable them to make important contributions, both to their own careers and to the manufacturing activities of the General Electric Company. At the conclusion of the formal phase of the Manufacturing Leadership Program, a broadening experience program continues to the extent justified by the men's capacity for further advancement in the organization.

TRAINING FUNDAMENTALS OF THE PROGRAM

Also of interest in an analysis of Apparatus Department Management Apprenticeships are some of the training fundamentals involved.

Participation. Great emphasis is placed on the active participation by the trainee in the many decisions that effect him. Trainees have an important voice in the selection of their assignments. It is they who organize the group meetings held at the various Apparatus Plant locations. It is they who conduct the Advanced Manufacturing Management Classes, and rotate as chairmen for these classes.[4] It is they who lead the frequent case studies, and carry on the role-playing activities which are often part of group meetings and classes.[5]

Personal Development. Particular emphasis is placed upon the development of friendly relationships between the trainees, the line executives and the training staff, and among the trainees themselves.

The practice of counseling is closely followed.[6] Trainees have periodic

[4] A rich literature is developing on the psychology of participation. See, for example, such fundamental references as: "Group Decision and Social Change," by Kurt Lewin. *Readings in Social Psychology*, Henry Holt, New York, 1947, pp. 330-344. See also "The Psychology of Participation," by Gordon Allport. *Psychological Review*, L III, May 1945, pp. 117-132.
See also "An Experimental Study of Leadership and Group Life," by R. Lippitt and R. K. White. *Readings in Social Psychology*, Henry Holt, New York, 1947, pp. 315-330.
An adaptation of this point of view toward supervisory training is presented in "A Human Relations Program for Supervision," by Norman R. F. Maier. *Industrial and Labor Relations Review*, vol. I, No. 3, April, 1948.

[5] Viz, *Role Playing and Management Training*, by Alex Bavelas. M.I.T. Department of Economics and Social Science publications.

[6] For one approach to this problem, see: *Counselling and Psycho-Therapy*, by Carl E. Rogers. Houghton-Mifflin, New York, 1942.

"bull sessions" with members of the training staff. They discuss their progress in the organization, and those features of their job performance which might be improved are brought out for their comments and judgment.

Responsibility. The apprenticeship type of training is most effective when the trainee is delegated actual responsibilities during his assignments. At each stage in his "upward training spiral" the trainee gets much practice in acting under responsibility for the consequences of his actions. This is most effectively accomplished through "learning by doing" rather than by looking over other people's shoulders.[7] Trainees are assigned to supervisory posts as quickly as possible to achieve this objective.

ADAPTING THE PROGRAM TO TRAINEES' BACKGROUNDS

An important selection fundamental in the Manufacturing Leadership Program is that administrative potential is to be found in men with widely varying backgrounds. Experience shows that successful managers have been graduates of the long established General Electric Apprentice Program; men who have come through the shops; liberal arts and business administration college graduates who have gone through the company's Business Training Course; and, of course, engineering graduates who have completed the General Electric Test Engineer Program. As a result, the door to Management Apprenticeships is open to men with any of these backgrounds.

This selection policy makes it necessary to establish a tailor-made training schedule to fit the particular needs of each individual within the broad framework of the Program's objectives. Classroom training in manufacturing fundamentals, for example, is carried on in such a fashion that it is geared to the different backgrounds that trainees may bring to the Manufacturing Leadership Program.

RESPONSIBILITY FOR THE TRAINING JOB

The actual job of training Management Apprentices is carried on by the Apparatus Department's line organization. Experience has shown that it is through the face-to-face contact of immediate supervisor and trainee that the most effective development of leadership can take place.

A Manufacturing Training staff is available for assisting the line organization. This staff also coordinates the inter-Works rotation phase of the Manufacturing Leadership Program. The objectives of the Training Staff may be simply summarized:

1. To aid the line in carrying on leadership training.
2. To stimulate an awareness of the importance of training at all levels of manufacturing management.

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[7] Of interest in this connection is John Dewey's point that if theory is taught separately from practice, it is almost impossible to expect the student to apply the theory to practical problems. If the fundamentals are taught in the first place by practical men in relation to practical problems, the student automatically learns to apply the theory. See: *How We Think*, by John Dewey. D. C. Heath, Boston, 1933, pp. 52-53.

3. To coordinate those programs which are department-wide in their scope.

HOW BUSINESS JUDGMENT IS DEVELOPED

Rotation among a series of functions provides a knowledge of the related nature of all manufacturing activities. Specialization is avoided during the training period, not because specialization is necessarily detrimental, but because the vision of the whole manufacturing problem is so vital to men who are being trained for managerial roles. In essence, the Management Apprenticeship Program is education rather than vocational training.

With responsible assignments and guidance, the trainee soon comes to realize that a great variety of imponderables enter into business decisions. When buttressed by classroom work which stresses the human aspect of business problems,[8] an approach is made to breaking down the habit of confining one's decisions solely to deductive thinking, which takes many intangibles for granted, or which ignores them. Instead, training emphasizes the need for reaching decisions based upon every factor—both certain and uncertain—affecting a problem.[9] Experience seems to show that this combined deductive-inductive approach is essential to successful administration.

OTHER TYPES OF TRAINING

Men continue to be broadened after they have been given a management post at the conclusion of their formal training. Company courses such as Better Business Management, the 9-Point Job, and Economics are concerned primarily with fundamental problems affecting management of a business rather than with specialized problems on any particular phase of operations. In addition, the men continue to move among various functions horizontally as long as it appears that they can continue to move vertically in the organization. In short, they continue to receive an education rather than purely vocational training.

CONCLUSION

The objectives of the Manufacturing Leadership Program described here may be briefly summarized:

1. To supply an adequate pool of qualified and seasoned individuals to fill key manufacturing management positions throughout the Apparatus Department.
2. To insure that complete opportunity is afforded to appraise and to develop the full administrative potential of these promising individuals.
3. To stimulate an awareness of the importance of this sort of training—with its complementary obligations of selection, appraisal, and placement—throughout all levels of manufacturing management.

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[8] Trainees complement their other reading with such material as *Conditions of Effective Leadership in the Industrial Organization*, by Douglas MacGregor. *Advanced Management*, Oct.-Dec., 1944. *Human Relations in Industry*, by Burleigh Gardner. Richard Irwin, Chicago, 1945. *Management and the Worker*, by F. J. Roethlisberger and W. J. Dickson. Harvard University Press, Cambridge, 1939.

[9] For a further discussion of this issue see *Organization and Management*, by Chester I. Barnard. Harvard University Press, Cambridge, 1948, Chapter VIII.

These objectives are met by:

1. Selection of adequate numbers of young men, with administrative potential, for training as Management Apprentices.
2. Development of the full capabilities of each trainee through "personal apprenticeships" in a succession of well-selected and increasingly responsible assignments, supported by classroom work, periodic counseling, and other means to aid the trainee to realize his full potential.
3. Placement of these competent young men in responsible manufacturing management posts upon the completion of the program; and continuation, on a less formal basis, of their broadening after this placement.

Management Apprenticeships, effectively operated, represent an effort to produce trained minds and administrative personalities. This type of development program welds together familiarity with facts, and the process of logical reasoning—so characteristic of engineering training—with ability to take intangibles into account. It involves a systematic view of things as a whole, rather than complete concentration upon the parts of the whole.

All these abilities are necessary in order to cope successfully with the problems of administering a complex manufacturing organization. To the extent that a capable young man is not equipped with these fundamentals, industry has the problem of supplying them if it is to overcome its most serious shortage—that of managerial skills. Management Apprenticeships offer an effective approach to the solution of this problem.

MANAGEMENT'S STORY—32 MILLION TIMES

By STEWART J. WOLFE
International Council of Industrial Editors
Dayton, Ohio

Management, too, has developed a "fourth estate" which is becoming increasingly significant as a means of communication. At present, Mr. Wolfe points out, employee publications are reaching more than 32 million workers in the United States and Canada alone, and all indications are that industrial journalism will become a more and more important factor in employer-employee relations. This article reports the findings of a recent survey which was designed to answer the questions: What types of publications are most widely used? What are the editors' responsibilities? Salaries? What practices are companies now following in regard to the publication of union news, reports on contract negotiations, grievance settlements, and the like?

INDUSTRIAL editing is rapidly becoming a big business within the management framework. Time was when the internal publication, which carried the company story primarily to the sales, research and production personnel of a business, was the football of all departments. There were few competent editors—most of them were clerks or secretaries who were admonished: "We're going to start a publication for the employees. See what you can do with it in your spare time." The finished product usually looked like it *had* been edited in someone's spare time.

As time went on, however, internal publications took on a newer look.

Primarily management was interested in doing a more competent public-relations job with its personnel. A good house organ, it was felt, would help improve relations, increase safety, stimulate interest in the company products or services, and inspire the employee's pride in his work.

But it was no easy task. The job management required was something that required better editorial ability, demanded people who knew what they were doing. The advent of World War II intensified the need for higher standards of editing and for better communication among those engaged in this work. Thus in 1941 the National Council of Industrial Editors was formed to help stimulate the progress of the profession. As a result of the participation of Canadian groups of editors, the National group was renamed the International Council of Industrial Editors. A strong organization now was available to help the editor. Meanwhile, colleges and schools all over the nation were establishing courses in industrial journalism with emphasis on internal publications. As time went on, industrial internal journalism assumed increasing importance as a management tool of communication.

With the end of the war, many publications were discontinued as an "economy" measure. Then a halt was called by many far-seeing managements who reasoned that, if such publications could do the job in war, it could be done in peace. Many employee periodicals were revived, and soon there were more internal publications than ever before. Management had recognized that they were indeed paying their way.

NUMBERS AND TYPES OF INTERNAL PUBLICATIONS

Recently a survey was conducted by the International Council to determine the present scope and status of industrial journalism. The survey showed that the circulation of internals had reached 32,854,667, with some 4,050 internals in the U. S. and Canada!

Thirty of these are dailies; 145, weeklies; 2,880, monthlies; 260, bi-weeklies; 405, bi-monthlies; 145, quarterlies; and 185 are published at periodic intervals. A further breakdown indicates that 2,895 are printed in magazine format, 1,035 are newspapers, 120 are in other formats; 3,280 are printed on enamel stock, 145 on newsprint, 130 on mimeo paper and 495 on offset paper. The vast majority, 3,230, are printed by letterpress; 495 are printed by offset, 130 mimeographed, 120 lithographed, 45 are produced by planograph and 20 by rotogravure. Distribution practices vary, with 1,590 given out at the plant; 1,810 mailed to employees, and 650 picked up by readers at various places in the plant.

One of the most significant questions in the survey referred to the number of publications as related to years of establishment. Only 415 publications have been published between 20 and 30 years; 234 between 15 and 20 years; 375 between 10 and 15 years; 1,565 between five and 10 years; and 1,452 between one and five years. It can thus be seen that the vast majority are of recent origin. Present editors are for the most part comparatively new at their jobs, with 2,905 having been on their present jobs between one and five years; 450 on the job between five and 10 years; 232 between 10 and 15 years; 138 between 15 and 20 years, and only 27 between 20 and 28 years.

Indications are that publications have been enlarged for the most part. 2,540 have expanded while only 565 have been reduced.

EDITORS' RESPONSIBILITIES AND SALARIES

Editors' jobs vary so far as responsibility is concerned. Fully 665 report to the president of the company, while 190 report to the executive vice-president, 550 to the public-relations manager, 312 to the general manager, 844 to the personnel manager, 432 to the industrial relations director; 522 did not reply to this question.

While 2,280 editors do the entire editorial job, only 1,150 also take pictures. Replies indicated that 3,112 of the editors decide on printing and engraving purchases while 3,024 editors specify the type of paper used. The art work is directed by 3,220 of the editors, while 3,080 specified miscellaneous services.

Another highlight of the survey was the question: On what basis should editors and their assistants be paid? The determining factor, in the opinion of 180, was the size of the publication; 1,020, the effectiveness of the publication; 126, the appearance of the publication; 25, the total number of readers; 27, the type of circulation; 1,650, the degree of responsibility; 506, background and experience; 118, length of service; 62, formal education; and 65, the number of pages to be edited.

Of those questioned, 1,540 had some experience in industrial relations; 1,590 in personnel relations; 1,865 in public relations; 2,195 in publicity; 1,881 in advertising; 1,396 in photography; 546 in printing; 408 in layout; 2,225 in feature writing; 2,326 in news writing; 425 in psychology; and 357 in economics.

Most monthly salaries fall into the $300-to-$500 category. 925 editors receive from $100 to $300 a month; 2,520 editors receive from $300 to $500 a month; 410 editors from $500 to $800 a month; and 80 above $800 a month.

NEWS COVERAGE

Some interesting facts were noted in regard to the handling of departmental news. While 3,180 print such news in the body of the regular edition, 326 print it separately and insert it in the body of the magazine.

One of the most significant and controversial issues was that concerning labor-relations news. While 2,790 publications do not touch the issue, 860 publish union news. Stories on contract negotiations are carried by 511; 2,576 do not cover such material. And while 2,865 carry no stories of grievance settlements, 131 do publish such details. It is of interest to note that 1,235 editors attend meetings where employee-relations policies are discussed; 1,816 do not. While in 1,305 cases the stories about employee relations or union contracts are written by the editor, in 636 they are written by some other person.

CONCLUSION

All of the foregoing seems to indicate that industrial editing has become big business. The International Council of Industrial Editors today has

affiliations in England, South America, France, Hawaii, and Australia. It is significant that overseas industrial publications have followed completely the trend set by their U. S. compatriots. Thus in one more way American enterprise is paving the way for the establishment of our mode of living abroad.

There can be no doubt that industrial publications have become vital tools of communication. Management is spending $109,000,000 annually to make them so—and the investment is paying rich dividends.

HOW DO YOU USE WAGE SURVEYS?

By EDWARD C. SCHLEH *

Properly used, wage surveys can be of considerable value to management in determining wage policies, controlling payroll costs, and maintaining worker morale. If the wage survey is to fulfill these objectives, however, considerable care and effort must go into the assembly of the data as well as into their interpretation. This analysis of the factors to be taken into consideration answers the following practical questions: Should weighted averages be used? How are bonuses and employee benefits counted? Should a company always strive to be "equal to the average"? What about supervisory, staff, and technical jobs? This article is particularly timely because of its consideration of special factors to be taken into account during periods of changing business activity and labor supply.

IN the last few years more and more companies have begun to use wage surveys as an aid in determining policy. Many of us seem to be confused, however, about the ways in which surveys can be helpful and also about the dangers in using them improperly. The following discussion is an attempt to point up some of the factors that directly affect survey results.

SHOULD WEIGHTED AVERAGES BE USED?

One of the most common figures used is the weighted average of rates actually paid. But let us analyze one aspect of the weighted average. In a period of rapid labor turnover, general prosperity, or rapid company growth, the weighted average of rates paid reflects pretty much the average of the lower half of salary ranges. But when the labor forces stabilize and people have been on jobs for a longer period of time, this average creeps up, even though none of the firms included has raised its ranges. Thus, if you use the weighted average primarily, you may find yourself in the strange situation of raising your rates on the basis of a survey of a group of firms, none of which firms has raised its schedules—and this is usually the case in a period of business recession. Instead of over-all weighted averages some people are especially attracted to statistical terms such as medians, modes, etc., but despite the fact that these sound more scientific, they present this same difficulty.

In order partly to meet this difficulty some firms use, in addition to

* Personnel Consultant.

any of the above figures, averages of established ranges or "going rates." A going rate is often defined as the rate to which a good average employee will go after he knows his job well. Ordinarily it is the maximum rate for an average employee; superior merit must justify a higher rate. There is some objection to the use of averages of established ranges and going rates on the grounds that they are hypothetical. However, they do overcome the difficulty of a weighted average, and taken in conjunction with the weighted average or scatter of rates paid, usually give a fair picture of the wages or salaries in the area.

HOW ARE BONUSES COUNTED?

How should we count bonuses? This question is further complicated if the bonuses are not guaranteed, as in the case of a year-end bonus passed annually by a board of directors. On incentive bonuses some firms have decided from experience that, generally speaking, about one-half could well be counted as wages for survey purposes. Frequently such bonuses are keyed in to start at say 80 per cent of standard and are aimed at producing about 120 per cent of standard. These firms then reason that it is logical to use the payment for 100 per cent of standard. In one survey of salesmen the writer found almost a straight inverse relationship between base rate and incentive earnings. In effect the one-half rule seemed to be borne out unconsciously here too, for as commissions rose, base salary seemed to go down. Where the payment of bonuses is decided each year, several firms believe it is helpful to ask, "Have the employees come to expect them?" If so, the bonuses are counted as salary or wages. Admittedly this question is hard to answer, but some indications are available in the number of times the bonus has been paid in the past, whether the amount was about the same each time, whether it was paid at regular intervals, what comments the interviewers at the employment office have received concerning it, etc.

SHOULD YOU SURVEY RANGES?

It is usually helpful to survey established ranges as well as actual salaries paid, but these alone may not indicate the best ranges for your company. In addition, you will want to consider the effect of ranges on efficiency in your company. It may be that in some jobs or in certain salary levels more depends on the ability and interest of the employees than in others. Or it may be that one job is just a stepping stone to another and the range should be viewed differently. In short, you may need a far different system of ranges than is suggested by the survey. The survey, after all, indicates what your competition is doing. It does not necessarily dictate efficient salary operations for your company. If the data is identified, however, valuable information may be obtained by studying the practices of certain firms in the group on particular jobs. The specific firms studied may vary with the job.

SURVEY ALL RATES?

Some firms that have no evaluation system internally have checked

many jobs specifically and assumed that slight differences in survey averages called for different rates. Such a reliance on surveys may lead to an unwieldy system of wage administration and one that is internally unpopular as far as employees are concerned. It's generally more satisfactory to survey a few key levels in different firms in the area and then fit in your jobs accordingly, keeping in mind some kind of logical internal relationship.

SHOULD THE SURVEY BE CONFINED TO THE INDUSTRY?

Some of us survey only our own industry. These surveys are worth while, but aren't your employees just as likely to go to work for some other industry? Other industries are sometimes very strong competitors for good employees. Disregard of these other industries may lead to a very unsatisfactory wage structure.

EQUAL TO THE AVERAGE?

Many of us make it a rule to be "equal to the average." We might question the advisability of following such a rule blindly. For example, being 10 per cent below an average doesn't generally affect your competitive position with regard to new employees. If it does, it generally does so on only the beginning rates, such as those for messenger, junior engineer, or stenographer. In any normal labor market, however, other factors may be more important. The specific needs of the firm, its physical location, the effect of certain jobs on the organization, may all be profitably weighed in with a survey. For that matter, an over-all average of an area may not be most important. There may be 10 or 12 firms that should be studied particularly as well as the over-all area average, since they are the strongest competitors for good employees.

HOW ARE SUPERVISORY AND STAFF JOBS SURVEYED?

We often hear complaints about the difficulty of surveying staff and first-level supervisory jobs. Perhaps we should consider the use to be made of the survey. Ordinarily, all that's wanted is a general indication of salary levels for these groups. Major differences in job content between firms can often be related to two or three factors such as number of people supervised, rate of highest person supervised, average cost of project worked on, number of reports made, etc. If this information is carefully discussed with each firm participating in the survey and collected with the salary data, you can generally interpret it in terms of your own jobs. In these cases, however, over-all survey averages often are of little value because of differences in job content. We should keep the objective of the survey in mind and the tolerance required. This rule, of course, applies to all surveys. If your management wants to know the general band of rates for these jobs, this type of survey is usually adequate. If you review past management decisions, you may find that this is generally the case. In fact, management decisions on many rate structures are made broadly rather than to such close tolerances as, say, $1 a month.

At times companies have relied heavily on surveys of differentials for supervisors in setting their supervisory rates. This is helpful, but used alone is a serious departure from the job evaluation approach. Sometimes the supervisor is practically a lead man. At other times he has extended his supervisory capacity to broad limits. Should the same rule of differential apply? It is usually better to follow the method outlined in the paragraph above in making any such survey of supervisory differentials.

PUBLISHED SURVEYS OF TECHNICAL JOBS

Perhaps a word might be said about the national surveys that have come into use in the last few years primarily with regard to rates for technical employees. These are usually collected directly from the employees without regard to job but with a notation as to length of service and educational background. There are some grave dangers in using such surveys. First of all, considering all the idle rumors that float around on salaries you might seriously question the accuracy of the data collected. Employees generally tend to err on the high side when quoting their salaries, especially if they know that they are to be published and may influence the salary structure of their own firms. Moreover, how can you use a survey of technical men of, say, 25 years experience, including section heads, lab heads, and even vice presidents, when you are considering the salary of a lab man of long service who has never demonstrated any special ingenuity or administrative ability? Finally, do you wish to weigh length of service so heavily, rather than contribution to the company, when considering these higher salary levels?

SPECIAL CONDITIONS AFFECTING SURVEYS OF RATES

Some of us survey monthly salaries and fail to get data on hours worked. A girl working 37½ hours per week and paid overtime for any additional hours worked is generally in a better position than one working 40 hours a week for the same monthly salary. You may wish to consider this in tabulating the data. However, you may weigh it in differently if there is no extra pay for hours worked up to 40.

In some areas a practice has grown up of giving a substantial raise to an employee after two or three months of service. The employee often looks at this two to three months rate as his hiring rate. In these areas a survey of starting rates only may not truly reflect company practices. In determining your salary policy you may want to know of these quick raises which effectively change the hiring rate. It is frequently difficult, however, to detect these practices without a discussion with each firm participating in the survey.

In some areas tradition or a recent general switch to job evaluation methods has left a considerable number of people outside the firm's established ranges or outside the area cluster. Often it is worth while to get the reasons for these extremes, e.g., long service, demotions, job evaluation, etc., so as better to interpret the results. It is usually unwise to disregard them arbitrarily as extremes, for they may be real parts of some firm's

salary schedules. This may be especially unwise if they should occur in a company which is large in the area and therefore important in the effect of its rate structure on the area rates.

Periods of decreasing business activity may call for different survey emphasis from periods of increasing business. For instance, starting rates, rates after two to three months, and increase policy may be of primary importance in one period. Average or going rates and benefits may be more important in another.

In using a survey in a large metropolitan area it is often helpful to show a breakdown between downtown and suburban rates. Frequently there is a difference. The difference between certain types of industries may also be helpful. For instance, discounts and other benefits of department store employment may have to be considered in reviewing rates. Of course, for any such analyses identification of the firms is essential.

HOW ABOUT BENEFITS?

Without consideration of the employee benefits in effect our survey may give us a warped view of prevailing conditions. It's important to know the various benefits, i.e., pensions, insurance, vacations, etc., that each of the other companies offers. Here, again, it is essential in making policy decisions to identify this data individually with the wage or salary data of the particular company. Firms sometimes differ in their practices depending on their workforce or the character of their business. For instance, in some areas financial houses pay for substantial pension or insurance programs for employees. Their salaries, however, may be a little lower than those of other firms. These other benefits may well make up the difference. Department stores frequently give special benefits, such as employee discounts, special employee sales, and time off with pay to shop during working hours. To the employee these may be sizable benefits.

Care should be taken to get all the data on policies. For example, on pension plans, does the company pay some, all, or part of the cost? Are adjustments made for Social Security payments? Do employees get vested rights? If so, when? The answers to these questions may change your perspective regarding the value of the benefit. Here, again, it is very difficult to get accurate information without a discussion with representatives of each firm in the survey.

When collecting data on policies we should try at the same time to get the experience of different companies with the variations of different policies. This will enable the company conducting the survey to collect valuable tips from the experiences of a group.

BENEFITS IN CENTS PER HOUR?

Consideration of benefits can, however, take an unrealistic turn. For instance, in recent years there has been a great deal of discussion on surveys of employee benefits in terms of "cents per hour." These surveys can be dangerously misleading. In one study made by the writer a survey of

certain benefits indicated an average cost of 20 cents an hour. However, when a composite set of policies that on the average made up this 20 cents were applied to two different firms in the group, they added up to 12 cents per hour in one firm and 28 cents in the other. The first firm was a growing company having mostly simple assembly and clerical jobs at the time. The latter was an old, stable firm with mostly skilled plant and office jobs. Since many employee benefits vary with length of service and with the income of the employee the same policies gave this much variation in results. On the assumption that the first, growing company were to stabilize, let's say in a period of business recession, the cost of these benefits was projected for five years. It was found that the same policies would then give 18 cents an hour. This would mean an increase in cost just when the company is hardest hit. Trying to raise benefits now to approximately 20 cents would cost this company about 27 cents in five years under these conditions. and so instead of being equal to the average, the company would be way above it.

EFFECTS ON EMPLOYEE RELATIONS

Often overlooked is the important employee relations aspect of surveys. Do the employees know that you are aware of practices in other companies? Periodically assuring employees that you are in close touch with the rates and policies of other reputable companies in the area will increase their confidence in the company and dispel doubts created by idle rumors of greener pastures elsewhere. Generally, an assurance that the company is in close touch with the data of other firms is all an employee wants. He usually doesn't care to see the specific survey findings.

These are a few suggestions on the uses of surveys. Intelligently used, they can be of considerable value to management in controlling personnel costs and in maintaining employee morale. However, to be of real use, considerable care and effort must go into the assembly of the data as well as into its interpretation. If this is done, almost any firm will find the cost negligible as compared with the benefits to be derived.

FACTORS INVOLVED IN ESTABLISHING A MERIT-RATING SCALE

By LEE STOCKFORD
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While it is generally agreed that formal systems for rating employee performance are desirable, it is as generally conceded that one of the major unfinished tasks of personnel administration is that of making merit rating more objective. Toward this end, Lockheed Aircraft Corporation undertook a series of controlled statistical studies to determine the degree to which certain weaknesses inherent in ratings obtained on an existing merit-rating scale could be reduced or overcome by designing a new scale and by training supervisors in the principles and techniques of rating. The following article is a step-by-step account of this study and of its conclusions regarding the type of scale to be used and its influence on raters' leniency and severity, the effects of supervisory training in rating on the reliability of the ratings given, and other significant findings.

INTRODUCTION

BY now, enough has been written in the form of textbook chapters and formal articles on the subject of merit rating to allow one to make two broad and important generalizations:

1. That the performance of employees in industry is constantly being rated or appraised by their supervisors and others, whether or not these judgments are recorded on a specially constructed scale.
2. That more often than not formal appraisals or ratings are to be preferred over informal appraisals, providing all the conditions and restrictions of scale construction, timing, policy control, training, etc., have been observed.

The purpose of this article is not to restate the fundamental principles underlying the whole rating procedure, but to present the results of a series of controlled statistical studies which were conducted as part of a program to revise the rating procedure at the Lockheed Aircraft Corporation, particularly as it affects the review of hourly-rated employees.

For many years, in accordance with its union contract, Lockheed has conducted reviews of its hourly-paid employees every 16 weeks, primarily for the purpose of appraising the value of their work in connection with the merit pay increase program. Several years ago, in order to make the 16-week reviews more "objective," supervisors were required to record the progress of their employees every four weeks on what was termed the "Progress Report." These progress reports were scored and averaged, and the results of the last four progress reports were recorded on the 16-week review sheets as numerical scores for each trait rated. The idea was to avoid a last-minute "halo" effect at the time merit raises were considered.

This system of grading four-week progress reports soon became so

NOTE: The authors wish to express their appreciation to Miss Freda Permisohn, Personnel Statistician, Lockheed Aircraft Corporation, for her assistance in the computations necessary to complete this study.

burdensome and routine in nature that the results were hardly worth the effort. The progress reports were therefore eliminated; and, at the time of the regular 16-week review, the supervisor's opinion of the employee was expressed in terms of numbers in a box on the review form originally intended to carry a summary of four detailed progress reports (see Exhibit A). This system was in effect when the present study was begun to improve the Lockheed hourly rating program.

PURPOSE AND SCOPE OF THE STUDY

The purpose of this study was to determine the degree to which certain weaknesses inherent in the ratings obtained on the existing merit-rating scale could be reduced or overcome by designing a new scale and by training supervisors in the principles and techniques of rating.

The scope of the study included an analysis of basic reference literature in the field of industrial psychology;* a review of previous research studies on merit rating which were conducted at Lockheed; the construction of a type of scale different from the scale then in use; an *experimental* study of ratings submitted on the new scale in comparison with those submitted on the old scale; and a series of follow-up studies on the new scale to validate its use in *practical* situations in order to determine the degree to which the gains observed in the original experiment were preserved.

RESULTS

Since this report covers the essential findings of four relatively independent studies, the results will be presented in four parts.

Part I will be a summary of the principal findings of the background studies.

Part II will cover the approach to the construction of the descriptive rating scale.

Part III will contain a discussion of original research study.

Part IV will present the follow-up statistical analysis of ratings submitted on the new scale.

PART I

Principal Findings of Background Studies

In the development of the current Lockheed Management Selection and Placement Plan, 54 separate items were subjected to a fairly rigorous analysis. Of these 54 items, one was merit rating. Several studies were conducted to determine the value of merit rating as a measure of the performance of the individual supervisors.

* Burtt, H. E., *Employment Psychology*, Houghton Mifflin Co., New York, 1926.
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LOCKHEED AIRCRAFT CORPORATION

EMPLOYEE PERIODIC REVIEW

DEPT	PLANT	S	NAME	M/F	REV. GROUP	OCCUPATION	SENIORITY DATE MO. DAY YEAR	EMPLOYEE NO.

PRESENT RATE	WAS EFFECTIVE MO. DAY YEAR	SENT TO DEPT. MO. DAY YEAR	TO BECOME EFFECTIVE MO. DAY YEAR	THIS REPORT MUST REACH PLANT PERSONNEL BEFORE MO. DAY YEAR

DESCRIBE BRIEFLY THE SPECIFIC WORK THIS EMPLOYEE IS NOW DOING

REMARKS AND REASON FOR THE RECOMMENDED RATE OR OCCUPATION CHANGE.

SUMMARY 16 WEEK PERIOD

	GRADE	WT.	SCORE
QUALITY		X 5	
QUANTITY		X 5	
KNOWLEDGE		X 1	
DEPENDABILITY		X 2	
COOPERATION		X 2	
TOTAL			

LEADERSHIP CHARACTERISTICS DOUBTFUL ☐ POSSIBLE ☐ POSITIVE ☐

DEPARTMENTAL RECOMMENDATION

INCREASE IN RATE ☐ YES ☐ NO HR.

NEW CODE | NEW RATE HR.

NEW OCCUPATION

RECORDED BY DATE

APPROVING SIGNATURES

DEPT HEAD — DATE

EXECUTIVE

PERSONNEL

PROGRESS REPORTS WERE RATED BY: 1 ,2

16 WEEK PERIOD GRADED BY DATE

FORM 3411-S

PERSONNEL COPY

Exhibit A. The Original Rating Form

The rating scale used for the review of supervisory personnel was similar in form (but not in traits) to that used for the review of non-supervisory personnel. The subordinate was rated on an evaluational scale in which his "worth" was appraised in terms of "Poor," "Below Average," "Average," "Above Average," and "Excellent," and the evaluation was expressed directly in terms of a numerical equivalent (ranging from 0 to 100) for this subjective appraisal.

In this study there were 485 supervisors in 30 departments working in a broad but homogenous type of work—airframe structures and final assembly. These supervisors were rated by the department heads for whom they worked. Three types of analyses of the ratings were made, the results of which are summarized in the following paragraphs.

1. *Leniency-Severity.* The differences in leniency between raters were so great that all the supervisors working for the four most severe raters were given ratings the scores of which were lower than the scores for the poorest ratings given by the two most lenient raters. The mean deviation of the mean ratings given by the 30 raters was 12 points.

2. *Differences between "known" and "unknown" ratings.* Up to the time that the experimental studies were conducted, the supervisors were never shown the results of the ratings. The department heads merely filled in the merit-rating scales, and sent them directly to the Personnel Records Department to be filed in the personnel folders of the men. At this time, it was decided that the department head should have a private interview with each man that he rated and explain the results of the ratings to him. At the close of the interview the rater and the subordinate were each to sign the review sheet to indicate that the interview had been conducted. Then, the rating scale was to be sent to the Personnel Records Department.

Two weeks after a regular periodic review (one that occurred at the official review period and in conjunction with which there were no interviews), the 30 department heads were asked to re-rate their subordinate supervisors, and, following these ratings, to explain them to their subordinates on an individual basis. The mean score for all 485 ratings in the regular review where the results of the ratings were "unknown" by those who were rated was 60 (S.D. = 21); in the experimental ratings made two weeks later, in conjunction with which the interviews were held, the mean rating was 84 (S.D. = 14). The difference of 24 points between the means for these two sets of ratings was significant beyond all reasonable doubt (Critical ratio = 20.0). This would indicate that the general level of leniency is significantly raised when the results of the ratings are known by the subordinate.

3. *Correlational Analysis.* Three correlational analyses were made to determine the reliability and validity of the ratings.

To obtain the coefficient of reliability, two sets of ratings were made with a time lapse of 10 days between each set. The range of reliability coefficients was from $r = +.401$ to $r = +.924$. The mean coefficient of reliability was $M_r = +.70$.

To obtain the validity of the ratings, the scores were correlated with (a) an objective measure of work performed by the mechanics under each supervisor; (b) the length of time the department heads knew each of the

subordinate supervisors; and (c) the social stimulus value of the personality of the supervisors who were being rated. The results of these studies are presented in the following table.

TABLE I

Mean Coefficient of Correlation Between Scores on Rating Scales and Each of Three Other Factors

Nature of Interrelationship	*Mean Coeff. Corr.*
Scores on rating scales vs. measurable output	r = +.22
Scores on rating scales vs. social stimulus value of personality	r = +.59
Scores on rating scales vs. length of acquaintanceship	r = +.65

From these data it is quite obvious that the ratings submitted on the scale are providing a measure of something other than actual production.

The results of the foregoing studies permit the following statements:

a. There are differences between supervisors, not only in the leniency with which they rate their subordinates, but also in the reliability with which they rate their subordinates.
b. Supervisors are more lenient in evaluating the worth of subordinates when they must confront the subordinate with the results of the ratings than they are when the results are withheld from the subordinate.
c. The score on the rating scale which has been designed to measure performance reflects personal-social relationships between supervisor and subordinate better than it reflects the actual productivity of the subordinate in question.

As a result of this study, the review sheet for the rating of the salaried employees was radically changed to conform more closely with typical graphic or descriptive type of rating scale. A restudy of ratings provided the following improvements:

a. Differences between "signed" and "unsigned" ratings were reduced from 24 to only 7 points.
b. Differences in leniency and severity were reduced significantly. In the first study, the mean deviation between raters was 12; here the mean deviation in leniency and severity is only 4.

Before the correlational analysis to determine the reliability and validity of the new ratings could be conducted, the decision was made to study and to revise the scale used in the review of hourly-paid employees.

PART II

Construction of the Descriptive Rating Scale For the Review of Hourly-Paid Personnel

In order to construct a scale that would be acceptable by those who would have to use it, the supervisors themselves were asked to participate in the study.

One hundred and thirty-eight supervisors (selected at random) were

asked to submit a list of 15 traits or characteristics on which hourly-paid people could be rated. They were asked to place a "3" before each of the five items they considered to be of most importance; a "2" before each of the five items they considered to be next in importance; and a "1" before each of the least important items. The supervisors were also asked to define the terms and to give descriptions of desirable, neutral and undesirable behavior under each of these traits.

When the lists of traits were returned to the Personnel Department, they were divided into three groups: (1) those submitted by supervisors in office-clerical functions; (2) those submitted by supervisors in direct functions; and (3) those submitted by supervisors in engineering functions. The items submitted by each group were then subjected to statistical analysis to determine the relative importance or popularity of each.

On the basis of all opinions studied in the preliminary investigation, eight traits were found to be of sufficient importance (popularity) to warrant further research. These were *Adaptability, Cooperation, Dependability, Initiative, Job Knowledge, Judgment, Quality, Quantity.* The trait *Initiative,* although ranking high in the opinion of most supervisors, was dropped from the list because the definitions submitted for this term overlapped too much with the definitions submitted for *Dependability.* The trait *Dependability* was the better of the two, as it was subject to more reliable ratings. The trait *Morale* (willingness and attitude) was substituted in the place of *Initiative.*

The final list included *Adaptability, Cooperation, Dependability, Job Knowledge, Judgment, Morale, Quality, Quantity.* These traits were then defined, and four degrees of behavior were established for each trait. The definitions for several of the traits were adapted from a scale used by the company several years ago. The definitions of the remaining traits were adapted from the definitions submitted by supervision. The scale was constructed along the line of a typical graphic scale without numbers and with no reference to qualitative terms such as "average," "excellent," "poor," etc. All ratings were to be made, then, in terms that "describe" behavior rather than in numerical equivalents for terms that "evaluate" supposed worth.

The reason for removing numbers and qualitative terms from the scale was twofold: first, to control one of the causes of differences between raters in leniency and severity; and, second, to increase reliability of the judgment on which the actual rating was predicated.

That individual differences in leniency could be reduced was supported by several demonstrations, the most significant of which was a survey of more than 100 supervisors and 100 college upper-division and graduate students. In this study the people were asked to rate (on a hundred-point scale) the value they would assign to each of several phrases which could be used as a basis for a rating scale. The results showed that the ranges and standard deviations of the values for those phrases which contained evaluational words ("average," "excellent," and "poor," etc.) were significantly greater than were the ranges and standard deviations of the values for those phrases which were devoid of any subjective words. It was felt, then, that language and its scaling in rating employees was among the most important problems with which to cope. Further studies on this phase of the problem are now in progress.

In reference to reliability it was believed that by making the language of the scale more objective, the supervisor's judgment or opinion would be less affected by changes in his mood or feeling tones than might otherwise be the case.

PART III

Original Research Study

The purpose of this phase of the study was to analyze ratings submitted on both the old evaluational scale and the experimental descriptive scale. The scope of the analyses included an investigation of (1) individual differences in *leniency* and *severity;* (2) *reliability* of rating; (3) a limited measure of *validity* of the ratings; and, finally, (4) a study of *factors* involved in rating.

At the time of the regular review period in September, 1947, 56 supervisors from five different operating units in the company were asked to participate in the study. These supervisors were asked to rate their subordinates on the regular company scale then in use, and also on the experimental scale. The following table shows the name of each of the operating units, the number of supervisors participating in this study, and the number of hourly employees who were rated.

TABLE II

Areas and Number of Personnel Included in Study

Operating Units	*Number of Supervisors*	*Number of Employees Rated*
Inspection	3	57
Manufacturing	18	408
Office Manager	9	132
Engineering	24	276
Lockheed Aircraft Service, Inc.	2	42
TOTAL—Five Units	56	915

Upon completion of the ratings, the scales were sent to the Personnel Records Department for scoring and analysis. The results of this study are presented as follows:

1. *Individual Differences in Leniency and Severity*

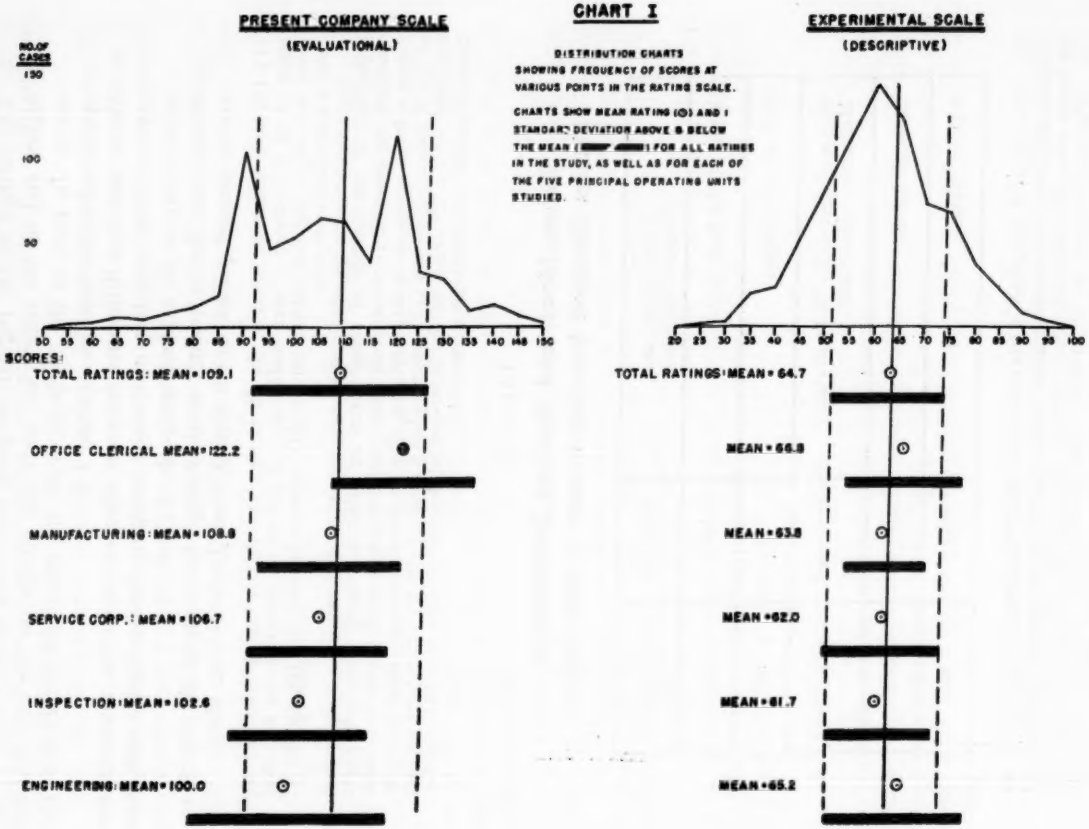
There were several major aspects in which the ratings on the two scales differed:

a. The shape of the distribution curves of the ratings on the company

CHART I

DISTRIBUTION CHARTS SHOWING FREQUENCY OF SCORES AT VARIOUS POINTS IN THE RATING SCALE.

CHARTS SHOW MEAN RATING (O) AND 1 STANDARD DEVIATION ABOVE & BELOW THE MEAN ( ) FOR ALL RATINGS IN THE STUDY, AS WELL AS FOR EACH OF THE FIVE PRINCIPAL OPERATING UNITS STUDIED.


PRESENT COMPANY SCALE
(EVALUATIONAL)
NO. OF CASES
150
100
50
50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145 150
SCORES
TOTAL RATINGS: MEAN = 109.1
OFFICE CLERICAL MEAN = 122.2
MANUFACTURING: MEAN = 108.8
SERVICE CORP.: MEAN = 106.7
INSPECTION: MEAN = 102.6
ENGINEERING: MEAN = 100.0
EXPERIMENTAL SCALE
(DESCRIPTIVE)
20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
TOTAL RATINGS: MEAN = 64.7
MEAN = 66.8
MEAN = 63.8
MEAN = 62.0
MEAN = 61.7
MEAN = 65.2

scale was bi-modal whereas the distributions of the scores on the experimental scale approximated the normal curve of distribution. (Chart I.)

b. The ratings on the regular company scale were skewed more to the higher end of the scale than were the ratings on the experimental curve. In fact, on the company scale, the curve did not close at the upper end of the base line. (Chart I.)

c. There was less difference between supervisors in the range or the portion of the scale they used when rating on the descriptive scale than when rating on the evaluational scale. (Chart I.)

d. A study of the individual mean ratings for each of the raters revealed several points worth noting (see Table IV, p. 104):

(1) On both scales the mean of the 56 ratings was slightly higher than was the mean of all 915 ratings. Later studies showed this to be caused by the fact that there is a slight negative correlation (—.20) between leniency and the number of cases a supervisor must rate.

Since the mean rating submitted by each supervisor was treated as a single item regardless of the number of subordinates he rated, and since there is a slight tendency for supervisors to be more lenient when rating a small group than when rating a large group, it is not surprising that on the evaluational scale the mean of the 56 mean ratings was 112.5 compared to a mean of 109 for 915 ratings, or that the mean of the 56 means on the experimental descriptive scale was 64.7 and the mean of the 915 individual ratings was 64.0.

TABLE III

Range, Means and Standard Deviations of Ratings Obtained from Supervisors on Both Scales

Range, Means and Standard Deviations	*Company Scale*	*Experimental Scale*
Mean of All Ratings	109.1	64.0
S.D. of All Ratings	18.0	10.1
Range of Means for 56 Supervisors Minimum — Maximum	81 — 35	56 — 72
Mean of Means	112.5	64.7
S.D. of Means	14.2	4.9

(2) The standard deviation of the means for the 56 supervisors when using the company scale was 14.2 or about three times as great as the standard deviation of the means when the supervisors were rating on the experimental scale (S.D. = 4.9).
(3) Whereas three of the supervisors when rating on the company scale had means that deviated more than the 18 points above 109 (the mean of all 915 ratings), and two supervisors had means more than 18 points below 109, none of the supervisors had means when rating on the experimental scale which deviated more than 8 points from 64 (the mean of all 915 ratings on the experimental scale). That is, when using the experimental scale the mean of the ratings given by each of the supervisors was within one standard deviation of the mean of all 915 individual ratings.

2. *Reliability*

Ten days after the original ratings were submitted to the Personnel Department, the 56 supervisors were asked to re-rate their employees. Coefficients of reliability or consistency were then obtained for each rater on each scale as well as for the various traits on the scale.

a. The coefficient of reliability for each of the raters was higher for the experimental scale than for the company scale. The mean coefficient of reliability for the entire group of supervisors was $r = +.77$ on the experimental scale, and $r = +.55$ on the company scale.

b. Certain items in the new scale were more reliable than others. The most reliable item was *Dependability* ($r = +.780$); the least reliable item was *Cooperation* ($r = +.491$).

3. *Validity*

The only measure of validity to be obtained in the study was based upon the ability of two or more equally qualified supervisors to agree with each other when independently rating the same group of employees. Because of the difficulties in obtaining a sufficiently large number of cases on whom this study could be conducted, the results are held in doubt and shall not be reported in full. However, mention shall be made of several significant findings:

a. The coefficient of correlation between the ratings submitted by two raters on the same group of men is lower than the coefficient of reliability.

b. The raters were better able to agree with each other when rating people on an objective scale, than the same raters were able to agree with themselves when rating the same people on a subjective scale.

c. *Quality* of work was the trait on which the supervisors were best able to agree with each other (coefficient of agreement $r = +.70$). *Cooperation* was the trait on which they were least able to agree with each other (coefficient of agreement $r = +.044$).

4. *Basic Factors in the Scale*

In order to determine the statistical factors which were involved, the rating on each trait was correlated with the rating on each of the other traits. From this inter-correlational analysis of the ratings, it was apparent that there were three general clusters of traits to which supervisors were reacting:

a. Technical Proficiency (Quality and Quantity)
b. Mental Proficiency (Judgment, Adaptability and Job Knowledge)
c. Social Proficiency (Morale and Cooperation)

This should certainly not be taken to indicate that these are the only three clusters or factors to which supervisors react, as any clustering will depend in part upon the nature and the number of the traits included in the scale.

Since the type of and the number of statistical factors which might

appear in ratings is dependent in part upon the number and the nature of the traits which make up the scale, the question was raised as to the degree to which other aspects of the scale might influence the *factors* to be obtained. In answer to the question, a further investigation was conducted. In this analysis the principle of *proximity* was studied by determining the mean coefficients of correlation between ratings given to adjacent traits ($r_{12} + r_{23} + r_{34} + r_{45}$, etc.), between ratings given to alternate traits ($r_{13} + r_{24} + r_{35} + r_{46}$, etc.), and between ratings given to every third trait ($r_{14} + r_{25} + r_{36} + r_{47}$, etc.).

The results of the study showed that the average inter-correlation for adjacent traits was +.66. As the distance between the various traits was increased, the size of the inter-correlations decreased to a point where the mean inter-correlations between ratings on traits separated by five or more intervening traits was +.46. This presented some good evidence to support the speculation that it is likely that the nature of the factors to be obtained from a statistical analysis of ratings is partially determined by the proximity of the items.

To verify this speculation a new scale was prepared. It consisted of the same traits appearing in a very different or "scrambled" order so that traits adjacent to each other in the first scale were not adjacent to each other in the "scrambled" scale.

Following the same procedure it was found that the mean coefficient of correlations of ratings given to traits adjacent to each other was +.65; and the mean coefficient of correlation of the ratings separated by five or more intervening traits was +.48. A summary of these mean coefficients of correlation is presented in Table IV.

A further exploration of this phase of the problem was made through

TABLE IV

Mean Inter-correlation of Traits by Relative Position on Scale, Showing Influence of Proximity

PROXIMITY OF TRAITS	MEAN COEFFICIENT OF CORRELATION	
	Traits on Original Experimental Scale	*Traits on Scrambled Scale*
Adjacent Traits	$M_r = +.66$	$M_r = +.65$
Alternate Traits	$M_r = +.60$	$M_r = +.58$
Traits Separated by Two Intervening Traits	$M_r = +.59$	$M_r = +.58$
Traits Separated by Three Intervening Traits	$M_r = +.51$	$M_r = +.55$
Traits Separated by Four Intervening Traits	$M_r = +.51$	$M_r = +.52$
Traits Separated by Five or More Intervening Traits	$M_r = +.46$	$M_r = +.48$

obtaining the coefficient of correlation between each trait and every other trait on the original experimental scale, and by obtaining the same inter-correlations for ratings submitted on the "scrambled" scale. The results of this analysis showed that the differences in the inter-correlations between ratings of the same traits varied from .01 to .26 depending directly upon the change in proximity of the traits from one scale to the other. The mean difference in the inter-correlations between ratings of the same traits on the two different scales was .17.

5. *Summary*

From the results of the experimental study, the following major points deserve summarization.

a. Differences between supervisors in the leniency or severity with which they rate their subordinates are significantly less when ratings are made on a *descriptive* scale than when they are made on an *evaluational* scale.

b. When rating on a *descriptive* scale, the supervisor's judgment is significantly more reliable than it is when the rating is made on an *evaluational* scale.

Also, the reliability of ratings on traits such as *Dependability* ($M_r = +.78$) and *Quality* of work ($M_r = +.70$) is greater than the reliability of ratings on the more "subjective" traits such as *Morale* ($M_r = +.50$) and *Cooperation* ($M_r = +.49$).

c. Validity of ratings is a subject that needs much more study. However, the pertinent though limited finding in this aspect of the original experimental study is that the coefficient of validity of *descriptive* ratings is significantly higher than is the coefficient of reliability of *evaluational* ratings.

d. Any further study of statistical *factors* in ratings should be conducted with due regard for the number of and kind of traits in the scale, and for the principle of proximity of these various traits.

PART IV

Follow-Up Statistical Analysis of Ratings Submitted on the Descriptive Scale

PURPOSE

On the basis of the findings presented in Part III, a final draft for a rating scale was prepared. This scale contained the five traits on which the most reliable ratings were obtained (Exhibit B).

To validate the experimental findings, a follow-up study was conducted on the ratings submitted by 107 supervisors on 2,185 hourly-paid subordinates. The specific purpose of this study was to determine (1) the degree to which the gains observed in the experiment were to be retained when the new scale was put to practical use, and (2) the degree to which ratings are influenced by certain traits or characteristics of the rater.

APPROACH

This study was restricted to a statistical analysis of ratings of subordinates submitted by 107 supervisors during the second regular review

LOCKHEED AIRCRAFT CORPORATION
EMPLOYEE PERIODIC REVIEW

DEPT.	PLANT	S	NAME	OCCUPATION	SENIORITY DATE: MO.	DAY	YEAR	EMPLOYEE NO.

PRESENT RATE	WAS EFFECTIVE: MO.	DAY	YEAR	SENT TO DEPT.: MO.	DAY	YEAR	TO BECOME EFFECTIVE: MO.	DAY	YEAR	THIS REPORT MUST REACH PERSONNEL BEFORE: MO.	DAY	YEAR

Describe briefly the specific work this employee is now doing and state the approximate length of time he has been on this work

Approximately how long have you known this employee?

The following factors are to be rated. The factors are listed alphabetically, therefore their position as listed in no way reflects the respective value of the individual factors.

ADAPTABILITY Versatility; Adjustment to Job or Changed Conditions; Ease with which New Duties are Learned	Is slow to learn; has trouble adjusting himself to changed conditions, needs constant instruction.	Learns fairly well; is a routine worker and needs detailed instruction for a new job.	Learns well with minimum amount of instruction; adjusts himself well in a short time.	Meets changed conditions with little effort; has outstanding ability to pick up new jobs.
DEPENDABILITY Your Confidence in Employee's Ability to Accept Responsibility	Does top grade work with minimum of supervision; outstanding ability to follow through	Willing to accept responsibility, requires very little follow-up.	Usually follows instructions; needs some follow-up	Refuses to or not able to carry much responsibility; needs constant follow-up.
JOB KNOWLEDGE Technical Knowledge of Job and Related Work	Has excellent knowledge of his job and related work; is very well-informed.	Seldom needs help; has good knowledge of his job and related work; is well-informed.	Knows his job fairly well; has little knowledge of related work.	Has limited knowledge of his job; knows nothing of related work.
QUALITY Accuracy in Work Freedom from Errors	Makes practically no mistakes, highest accuracy.	Seldom makes errors; is accurate; does high-grade work.	Makes some errors but does passable work.	Makes mistakes frequently.
QUANTITY Output - Speed	Output below standard definitely slow	Output meets standard is satisfactory	Does more work than expected; is fast; exceeds standard.	Exceptionally fast, unusual output

COMMENTS

Rated by

Will changes in rate or occupation be recommended at this time? Yes ☐ No ☐

If answer is "Yes" be sure to attach a completed Change of Status notice to this form.

Dept. head Date

Executive Date Personnel Dept. Date

FORM NO. 2411-S

Exhibit B. The Revised Rating Form

period in which the new scale was used (December, 1948). None of these supervisors knew in advance of the study that an analysis of their ratings was to be made, nor was there any general announcement that a study would be conducted at that time. It is believed that the withholding of this information permitted the obtaining of ratings under the most natural conditions possible at the time.

SCOPE OF THE STUDY

It is apparent from a review of literature and from the data presented so far that three of the most important problems in merit rating are *reliability, individual differences in leniency,* and the influence of bias or *"halo."* The results of the study will show:

1. The reliability with which raters expressed their judgment of the performance of their subordinates;
2. The differences between raters in *leniency;*
3. The influence of bias or *"halo";*
4. The interrelationship of *reliability, leniency* and *"halo,"* and the degree to which these three aspects of rating are influenced by such factors as:
   a. The level of mental ability of the rater;
   b. Special training in the function of rating;
   c. Amount of experience as a rater;
   d. The age level of the supervisor;
   e. Certain components in the Kuder Interest Preference record;
   f. Certain characteristics of the ratings themselves.

The analyses were conducted on the ratings submitted by 77 of the original group of 107 supervisors. These 77 supervisors rated 1,928 subordinates. The size of the groups rated by each supervisor ranged from 18 to 56 subordinates with a mean of 25 subordinates per supervisor. The ratings from the remaining 30 supervisors were excluded from the study because of the small number of subordinates assigned to each supervisor. For these supervisors, the groups ranged in size from 4 to 15 with an average number of eight subordinates.

TRAINING IN THE RATING FUNCTION

Before presenting the results of the follow-up study, it is essential that certain points regarding the 77 supervisors be made clear. These people were all in the lowest level of full-time salaried personnel responsible for the direct supervision of hourly-paid employees. The supervisors did not comprise one homogeneous group in all respects. There was at least one known factor on the basis of which the subjects could be divided into two separate groups. This was the factor of specialized training in the function of rating.

The specialized training consisted of approximately six hours of instruction on the philosophy and principles of rating drawn from the sources listed earlier in the report; participation in the selection of items to be used in the scale; participation as experimental subjects in the original research studies; and the benefit of follow-up interviews in which their performance

as raters was explained to them in detail. This training was restricted to 32 of the 77 supervisors in the study.

The remaining 45 supervisors received only the two-hour general orientation or explanatory session given to all members of all levels of supervision throughout the entire company. This orientation session was for the purpose of acquainting all members of supervision with the fact that there would be a change in the rating scale, the reasons for the change, and a statement of the changes in the merit review procedure required as a result of installing the new scale.

The following table shows a list of the factors which were held in control: that is, those known, measured traits in which there were no significant differences in either means or ranges between the "trained" and the "untrained" classes of supervisors.

TABLE V

Mean and Range of Scores for Traits on Which There Were No Differences Between Supervisors in "Trained" and "Untrained" Groups

TRAIT	*Total Group* (N = 77)		*Trained Group* (N = 32)		*Untrained Group* (N = 45)	
	Mean	*Range*	*Mean*	*Range*	*Mean*	*Range*
Mental Maturity (Calif. Test M.M.)	IQ — 123	91 to 153	123	94 to 147	123	91 to 153
Persuasive Compon. (Kuder Pref. Record)	63 %ile	1 to 99	65 %ile	1 to 99	62 %ile	1 to 99
Social Service Comp. (Kuder Pref. Record)	54 %ile	1 to 99	52 %ile	1 to 90	55 %ile	1 to 99
Admin-Supervisory Int. (Out of Kuder Items)	68 %ile	5 to 99	70 %ile	10 to 99	65 %ile	1 to 99
Age (Chronological)	38 Yrs.	26 Yrs. to 55 Yrs.	37 Yrs.	27 Yrs. to 53 Yrs.	39 Yrs.	26 Yrs. to 55 Yrs.
Supervisory Experience (Number of Years)	5 Yrs.	6 Mos. to 10 Yrs.	5 Yrs.	1 Yr. to 10 Yrs.	5 Yrs.	6 Mos. to 10 Yrs.
Training (Formal Academic)	H.S.— 2 Yrs. Adv.	9th Grade thru 4 Yrs. Col.	HS. — 2 Yrs. Adv.	10 Grade thru 4 Yrs. Col.	H.S. — 2 Yrs. Adv.	9th Grade thru 4 Yrs. Col.

RELIABILITY

The coefficients of reliability for the 77 supervisors ranged from $r = +.130$ to $r = +.952$; and the mean coefficient of reliability was $r = +.798$. Yoder gives $r = +.75$ as the lowest acceptable coefficient of reliability for rating scales. Of the 77 supervisors, 55, or approximately 70 per cent of the group submitted ratings the reliability of which equaled or exceeded this point.

These results compare favorably with the results obtained in the experimental study. In the original study, for a comparable group of supervisors, the mean coefficient of reliability was $r = +.77$ for the experimental "descriptive" scale, and a coefficient of reliability of $r = +.55$ for the old "evalua-

tional" scale. The results indicate that the gains observed in the experiment were retained when the "descriptive" scale was put to practical use.

LENIENCY

Leniency was measured in terms of the mean score on the rating scale given by each of the supervisors to their respective subordinates. A frequency distribution was made of these means. The mean of the means was 66.0, and the standard deviation of the means (S.D.) was 6.7. In the original experimental study the mean of the means was 64.7 and the standard deviation was 4.9. The difference between the two sets of figures is not statistically significant.

"HALO"

For this study "halo" or bias is approximated through the medium of length of personal acquaintance between the respective supervisors and each of the subordinates they rated. Although not a perfect measure of bias, there are two good reasons for using this measure for the criterion of "halo."

1. It is highly reliable.

2. A previous investigation on over 400 cases showed a coefficient of $r = +.64$ between length of acquaintance and acceptability of personality. This last measure was obtained by reconstructing items typical of those used in personality inventories so that they could be used in a "buddy" rating scale rather than in a self-inventory. A coefficient of correlation of this magnitude ($r = +.64$) justifies the generalization that the longer one has known another the more acceptable becomes the other's personality.

A coefficient of correlation was obtained between the length of time each of the 77 raters knew each of the subordinates he rated and the scores on the rating scales. These coefficients ranged from $r = -.07$ to $r = +.761$ with a mean coefficient of $r = +.420$.

This indicates that, generally speaking, "halo," as measured, exerts a low positive but significant influence upon the degree to which the supervisor rates the output of the subordinate. However, the principles of individual differences operate to a very strong degree (as seen by the range of coefficients of correlation: $r = -.07$ to $r = +.761$).

It is interesting to note that when using an evaluational type of scale, the mean coefficient of correlation between length of acquaintance and the score on the rating scale was $r = +.65$; on the descriptive scale this coefficient of correlation was only $r = +.42$.

INFLUENCE OF VARIOUS FACTORS ON RELIABILITY

As previously reported, the mean coefficient of reliability for the entire group of 77 supervisors was $r = +.798$. Additional studies indicated that the reliability of merit ratings is modified by various factors. The factors considered in this report are those presented in Table V, in addition to the special training. Table VI shows the degree to which each of these factors is related to the reliability of the ratings for the total group of supervisors as well as for those in the "trained" class and for those in the "untrained" class.

TABLE VI

Mean Coefficient of Correlation between Each of Several Characteristics of the Raters and the Reliability of Ratings for All Supervisors and for Those in the "Trained" and "Untrained" Groups

Relationship of Coefficient of Reliability with Other Factors	*Total Group* (N = 77)	*Trained Group* (N = 32)	*Untrained Group* (N = 45)
Mean Coefficient of Reliability Range Coefficient of Reliability	r = +.798 r = +.130 to r = +.952	r = +.85 r = +.570 to r = +.952	r = +.76 r = +.130 to = +.946
I.Q. of Rater vs. Coefficient of Reliability	r = +.33	r = +.52	r = +.20
S.D. of Ratings vs. Coefficient of Reliability	r = +.42	r = +.24	r = +.66
Admin-Supervisory Interests vs. Coefficient of Reliability	r = +.09	r = +.14	r = +.02
Chronological Age vs. Coefficient of Reliability	r = +.09	r = +.05	r = +.13
Persuasive vs. Coefficient of Reliability	r = +.08	r = +.21	r = −.01
Social Service vs. Coefficient of Reliability	r = +.03	r = +.06	r = 0.00
Supervisory Seniority vs. Coefficient of Reliability	r = −.03	r = −.05	r = +.01
Leniency vs. Coefficient of Reliability	r = −.15	r = +.01	r = −.33
Size of Group Rated vs. Coefficient of Reliability	r = −.17	r = −.07	r = −.31
Formal Training vs. Coefficient of Reliability	r = −.22	r = −.11	r = −.34
Influence of "Halo" vs. Coefficient of Reliability	r = −.31	r = −.20	r = −.38

In reference to the data presented in Table VI the following observations are to be made. Whereas the mean coefficient of reliability for the entire group is r = +.798, the mean for the "trained" class is r = +.85, and the mean for the "untrained" class is r = +.76. Before training, the mean coefficient of reliability for the "trained" group was r = +.77, or virtually the same as the mean reliability of the present "untrained" class. This difference in the coefficients of reliability (r = +.85 and r = +.77 or r = +.76) is significant, and, so far as can be determined, is attributable almost wholly to training alone.

The standard deviation of the rating scores bears a positive relationship to the reliability of the ratings ($r = +.42$ in the total group). Reliability is less dependent upon the standard deviation of the ratings among those who were trained ($r = +.24$) than it is for those in the untrained class ($r = +.66$).

For the total group, the mental level of the raters bears a low but positive relationship to the reliability of his ratings (r I.Q. vs. Coefficient of Reliability $= +.33$). Among those in the "trained" class the correlation between I.Q. and reliability of ratings is $r = +.52$; whereas among those in the "untrained" class, this coefficient of correlation is $r = +.20$. This would indicate that the I.Q. level of raters in itself bears little relationship to the reliability of ratings, but that it is the brighter supervisors who make the greatest improvement when subjected to training. This last contention is supported by the data presented in Table VII.

TABLE VII

Relationship of I.Q. to Mean Reliability in the "Trained" and "Untrained" Classes

I. Q. Grouping	*Mean Reliability*	
	Trained	*Untrained*
I.Q. = 125 or greater	$M_r = +.88$	$M_r = +.79$
I.Q. = 124 or less	$M_r = +.79$	$M_r = +.74$

The supervisors in each class, i.e., "trained" and "untrained," were divided into two groups of relatively equal size. One group is composed of those with I.Q. scores of 125 or greater; the second group is composed of those with I.Q. scores of 124 or less. The data shows that for those with I.Q. scores of 125 or greater and who were "trained," the mean coefficient of reliability was $r = +.88$; whereas, for those in the same I.Q. range who were not trained, the coefficient of reliability of ratings was $r = +.79$. The difference between the coefficients is .09. Among those with I.Q. scores of 124 or less, the mean coefficients of reliability for the "trained" class is also $r = +.79$, and for the "untrained" class it is $r = +.74$; a difference in r's of only .05. From these data it is to be seen that the mean coefficient of reliability is the same for the more intelligent supervisors in the "untrained" group as it is for the "trained" supervisors in the less intelligent group ($M_r = +.79$). Also, that training the more intelligent supervisors results in a mean coefficient of reliability in rating of $+.88$, which is greater than the sum of the independent gains in reliability attributable to *intelligence* and *training* alone.

It must be remembered that the supervisors in this study constitute a generally superior group from the standpoint of mental maturity. Whether these same relationships between I.Q. and reliability would be obtained in a comparable study of supervisors drawn from a different level of mental maturity or from a more extended range of I.Q. scores is a matter to be left untouched by this study.

The items of Administrative-Supervisory Interest, Chronological Age, Persuasive Interest and Years of Experience as a Supervisor bore no relationship to reliability of ratings among those in either the "trained" or "untrained" class of supervisors.

Leniency of ratings, the size of the group rated, amount of formal academic training, and the influence of "halo" all yield significant but low negative correlations with reliability among those who were in the "untrained" class. Among those in the "trained" class, the influence of these items on reliability of the ratings was reduced to coefficients of negligible size. To a small but definite degree, then, it was found among raters in the "untrained" class that:

1. The more lenient the rater, the lower was the reliability of the ratings;
2. The larger the number of people rated, the lower the reliability of the ratings;
3. The more formal academic training, the lower the reliability of the rater; and,
4. The more the individual ratings are influenced by "halo," the lower the reliability of the ratings.

INFLUENCE OF VARIOUS FACTORS ON LENIENCY

As in the case of reliability, it was found that several of the factors in the study were directly related to the leniency with which the supervisors

TABLE VIII

Interrelation of Major Items in the Study with Leniency

Nature of Relationship	*Coefficient of Correlation*
I.Q. vs. Leniency	r = —.43
Persuasive vs. Leniency	r = —.43
Reliability of Ratings vs. Leniency	r = —.15
Supervisory-Administrative Interest vs. Leniency	r = —.10
Size of Group Rated vs. Leniency	r = —.10
Social Service Interest vs. Leniency	r = —.09
Academic Training vs. Leniency	r = —.07
Chronological Age vs. Leniency	r = 0.00
Supervisory Experience vs. Leniency	r = +.02
S.D. of Ratings vs. Leniency	r = +.06
"Halo" vs. Leniency	r = +.17

rated their subordinates. Of the various items studied in relation to leniency, only those bearing a significant relationship will be discussed in detail. Whereas the "trained" class of supervisors rated their subordinates with a degree of reliability that was significantly greater than the reliability with which the "untrained" supervisors rated their subordinates, it is interesting to note that there was no significant difference between the two groups of supervisors in the leniency with which they rated their employees.

Only two of the factors studied yielded significant correlations with leniency. These were the Persuasive Component of the Kuder Preference Record and the California Test of Mental Maturity. In each case the coefficient of correlation was r = —.43. It is of interest to note that the coefficient of correlation between the Persuasive Component and the I.Q. obtained from the test of Mental Maturity was r = —.07. This would indicate that:

1. The more intense the persuasive interest and the higher the I.Q., the less lenient will be the rater in rating his subordinates; and,
2. Whatever relationship either of these factors has with leniency, it is (within this group) relatively free from the influence of the other factor.

Table VIII shows the degree to which each of the principal items considered in this study correlates with the leniency of the raters. Since there was no significant difference in leniency between the "trained" and "untrained" classes of supervisors, only the coefficients for the total number of cases will be shown.

INFLUENCE OF VARIOUS FACTORS ON "HALO"

"Halo," the third of the basic problems in merit rating, is not a unitary problem to be treated by itself; but, as in the case of reliability and leniency, a phenomenon related to other factors. Of the various items studied in relation to "halo," five yield correlations of sufficient magnitude or significance to warrant specific mention. These are *"training" in rating, mental maturity, reliability of ratings, supervisory-administrative interest and persuasive interest.*

Whereas within the entire group of 77 supervisors the mean coefficient of correlation between length of personal acquaintance and score on the rating scale is r = —.42; for those supervisors in the "untrained" class this mean r is —.48, and for those in the "trained" class, this mean r is only —.32 (see Table IX). This would support the assumption that special training in rating reduces the influence of bias on ratings.

The correlation between mental maturity and "halo" for the total group is r = —.46. For the "trained" class this correlation is r = —.68; and for the "untrained" class it is r = —.30. These results indicate that, generally speaking, the ratings submitted by brighter supervisors are less colored by bias than are the ratings submitted by those supervisors who are less intelligent. In addition, training serves to intensify this difference between the more intelligent and less intelligent supervisors. This point can be shown in another manner (Table X).

TABLE IX

Mean Coefficient of Correlation Between Each of Several Characteristics of the Raters and of the Ratings and the Factor of "Halo" for all Supervisors and for Those in the "Trained" and "Untrained" Groups

Relationship of "Halo" with Other Factors	*Coefficient of "Halo"*		
	Total Group	*Trained*	*Untrained*
Mean Coefficient of "Halo" Range of Coeff. of "Halo"	r = +.42 r = −.07 to r = +.76	r = +.32 r = −.07 to r = +.71	r = +.48 r = −.06 to r = +.76
I.Q. of Rater vs. "Halo"	r = −.46	r = −.68	r = −.30
Reliability of Ratings vs. "Halo"	r = −.31	r = −.21	r = −.38
S.D. of Ratings vs. "Halo"	r = −.20	r = −.17	r = −.24
Supervisory-Administrative Interest vs. "Halo"	r = −.25	r = −.30	r = −.16
Age of Rater vs. "Halo"	r = +.07	r = +.04	r = +.09
Persuasive Interest vs. "Halo"	r = −.25	r = −.35	r = −.12
Social Service Interest vs. "Halo"	r = −.17	r = −.15	r = −.19
Size of Group Rated vs. "Halo"	r = +.08	r = +.06	r = +.11
Leniency vs. "Halo"	r = −.17	r = −.26	r = −.11
Academic Training vs. "Halo"	r = −.10	r = −.08	r = −.14
Supervisory Experience vs. "Halo"	r = +.14	r = +.09	r = +.21

TABLE X

Relationship of I.Q. to "Halo" in "Trained" and "Untrained" Classes

I.Q. Scores	*Mean Correlations*	
	Trained	*Untrained*
I.Q. = 125 or higher	$M_r = +.28$	$M_r = +.35$
I.Q. = 124 or lower	$M_r = +.41$	$M_r = +.55$

The supervisors in both the "trained" and "untrained" classes were divided into two relatively equal groups: (1) those with I.Q. scores of 125 or higher; and (2), those with I.Q. scores of 124 or lower. The mean coefficient of correlation between length of acquaintance and scores on the rating scale is shown for each group.

These data reveal that (1) the ratings submitted by the less intelligent "untrained" supervisors are most colored by bias (coefficient of "halo" is $r = +.55$); (2) the ratings submitted by the more intelligent "trained" supervisors are those that are least colored by bias (coefficient of "halo" is $r = +.28$); and that (3) intelligence may be more important than "training" in reducing bias as seen by a comparison of the mean coefficient of "halo" for the more intelligent "untrained" supervisors ($r = +.35$) and the mean coefficient of "halo" for the less intelligent "trained" supervisors ($r = +.41$).

In the case of the Supervisory-Administrative and Persuasive interest components, the relationship with "halo" were low negative correlations (Supervisory-Administrative Interest vs. "halo" $r = -.30$; and Persuasive Interest vs. "halo" $r = -.35$).

This would indicate that the more intense the levels of these interests within the supervisor, the less the ratings he submitted would be colored by bias. The relationship of reliability to "halo" was covered in the discussion of reliability of ratings, where it was shown that a negative correlation existed between these two variables.

SUMMARY AND CONCLUSION

As stated in the introduction to this article, the general purpose of the study was to determine the degree to which certain weaknesses inherent in the ratings submitted on an existing scale could be reduced or overcome by designing a new scale and by training supervisors in the principles and techniques of rating. To obtain the information required for the study, several problems were investigated:

1. To determine the degree to which reliability, leniency and bias existed in the former merit-rating system;
2. To determine the influence of the format of the rating scale, special training in rating and certain characteristics of the supervisors upon reliability, leniency and bias.
3. To modify the rating procedure and to conduct several follow-up studies in order to determine the net gains once the new procedure had been put to practical use.

The specific isolated studies conducted during these investigations revealed certain facts which are of sufficient interest and importance to warrant special mention:

1. The type of scale to be used has a marked influence on the value of merit ratings. Ratings on "objective" or *descriptive* scales are more reliable, less influenced by bias, and show less deviation between raters in leniency and severity than is characteristic of ratings on "subjective" or *evaluational* scales.
2. Special training given to supervisors in the principles and techniques of rating raises the reliability of, and reduces the influence of bias on, the merit ratings that they give their subordinates.

3. The higher the level of mental maturity of the rater, the more reliable, less lenient, and less biased will be the ratings he gives his subordinates.
4. Certain components of the interest inventory provide measures that related to a reduction of leniency and of the influence of bias in rating.
5. Within the scope of this specific study, the data revealed that the scores on merit-rating scales measure primarily the personal-social relationships between supervisor and subordinate rather than the output of the subordinate in question.

From this study, two points at least can be concluded. *First,* the study represents a good illustration of an accepted "fact" in industrial relations that work will be performed more efficiently if people with the suitable characteristics are selected to do the job, if they are given the proper tools with which to work, and if they are trained to use these tools. *Second,* that further assertions regarding the use and value of merit-rating scales should be based upon tested and demonstrable fact and not upon speculation and assumption.

TURNING DOWN AN APPLICANT FOR EMPLOYMENT

By LAWRENCE FREEMAN
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Much has been written about the role of employees as articulate public relations representatives—for better or worse—of the company they work for. But since every organization must turn down many more job applications than it can accept, there gradually develops a group—much larger than the workforce—which may have a great deal to say about the way the company treats people who come to it for jobs. Often the same firms that spend thousands yearly for public relations turn down applicants for employment in such a brusque and routine fashion that they are almost certain to lose friends and alienate potential customers. Here are some pointers on writing courtesy and consideration into your letters to unsuccessful applicants.

TURNING down an applicant for employment by letter may be done in a manner that will preserve the good will of the applicant toward your firm. The minimum requirement for an effective refusal—the least you can do—is to refrain from transforming the applicant's understandable disappointment over the refusal into resentment and animosity toward you and your firm.

Letters refusing employment may even increase the applicant's respect and admiration for your firm, for properly written, your turndown letter will lead the applicant to say, "I didn't get the job but I appreciate the fine way they treated my application."

To begin with, the turndown letter should make the applicant feel that you consider his application a sincere compliment to your firm. An abrupt turndown, couched in stilted language, is hardly conducive to producing the results you wish to obtain. Consider the following:

Dear Sir:

Reference is made to your letter of April 3. We regret to advise you that we do not have a position for you with our Company.

Yours truly,
(Rubber stamp signature)

* * *

Dear Sir:

Referring to your letter of May 5 regarding work for this Company, please be advised that at this time we do not have an opening.

Yours truly,
(Typewritten name, no signature)

* * *

Dear Sir:

Your letter of the 9th inst. is on file. So far nothing has developed in the line of an opening for you.

Yours very truly,

* * *

Dear Sir:

Your communication of February 2 concerning the possibility of employment is on my desk. I am sorry that there is no opening in the department at the present time wherein I could utilize an individual like you.

Yours truly,
(Initials of manager)

* * *

Dear Sir:

In reply to your letter of April 2, we wish to advise that generally speaking, employment in the Manufacturing Department of ———— Corporation is done at the plants, and that we cannot consider your application here.

Yours very truly,
(Typewritten name of firm, no signature)

All the foregoing examples were individually typed on letterheads representing firms that spend large sums of money each year on good will and business promotion. One of the letters was written by a representative of a firm which last year contributed substantially to a million-dollar nation-wide campaign to "sell" the industry.

By way of contrast, consider the following opening paragraphs from letters that were also individually typewritten. Each contained a personalized salutation.

Thank you very much for sending along your letter of application and your résumé, which were most interesting and comprehensive.

* * *

Thank you for the compliment you paid our organization when you applied for a position in our firm.

* * *

We appreciate your sending us your very fine résumé and application for a position in our Marketing Research Department.

* * *

We are pleased to receive your letter of application for employment, and we thank you for your interest in our company.

* * *

Thank you for your letter of application for employment with our company.

* * *

Your letter outlining your qualifications for a position with this company has been received, and we wish to thank you for sending it in.

* * *

Thank you for your recent application for a position as office assistant. We consider your desire to work for us a compliment to our firm.

WHY DID THE APPLICANT WRITE YOU?

Let us look at a typical letter of application and analyze briefly the factors that prompted the applicant to submit it:

Mr. John Blank, Manager
Malvern Electric Company
100 North Richard Avenue
Troy, New York

Dear Mr. Blank:

Dr. James Simmons, Dean, College of Business Administration, Midwestern University, has recommended that I apply for a position as office assistant in your organization. Please consider me as an applicant.

My qualifications for this position are listed in detail on the inclosed personal data sheet. From this sheet you may note that on May 31, 1949, I shall be graduated from the College of Business Administration, Midwestern University, with a B.S. degree in Business Administration, majoring in accounting and minoring in marketing. You may also note that I have had considerable practical office experience in the employ of the ———— Company, Chicago, Illinois.

It will be a pleasure to call for a personal interview. The inclosed, addressed postal card is for your convenience in telling me when and where I may meet you.

Sincerely yours,
John Smith

Admittedly no masterpiece, the letter is nevertheless typical of the thousands received annually by employment managers. Accompanied by a personal data sheet or résumé that explains in detail the applicant's background, training, education and experience, the letter and the data sheet usually represent a considerable amount of honest and sincere effort on the part of the applicant who prepared them. Of course he must have wanted to work for your firm, or he wouldn't have written you for a job in the first place. At least that seems to be a valid assumption to make unless you know that the applicant is a drifter or is on the blacklist of other employment managers.

Assuming, then, that the applicant is well qualified, what are the factors which may have influenced him to make your firm the firm of his choice?

First of all, he may have been influenced by friends or relatives who are now employed or who at one time or another may have been employed by your firm. Through them he has come to admire your firm and has built up a desire to work for you. Or from the general reputation your firm enjoys, he may have decided that it represents the opportunities he wants in a job: opportunity for advancement, good working conditions, a progressive attitude toward new products, a liberal management-labor

policy, suitable pension, retirement, sickness and accident plans, etc., and, of course, a modicum of security reflected in a satisfactory starting salary. These may be impressions about your firm that he has picked up from friends or relatives and from other well-wishers.

Second, he and his relatives and friends may be life-long users and admirers of your products. Many years ago a youngster of 11 wrote to the president of a large corporation asking for a model of the product the corporation manufactured. In reply, the lad received a curt refusal to the effect that the president couldn't be bothered with the silly requests of children. Later, when the boy grew up, he became president of a large company of his own. But not once in his lifetime did he ever purchase the product of the manufacturer from whom he received the curt letter, and he probably discouraged many others from buying the product.

An isolated example? But the point is that many incidental influences may join to produce an applicant's good or bad impression of your firm. True, you cannot hire all applicants who may think highly of your firm and its products, but you can turn down an applicant in a way that will avoid giving offense.

THE NEW APPROACH TO JOB SELECTION

In the third place, the applicant may have made your firm his choice as the result of a thorough and painstaking analysis of all the firms offering employment in the field of his vocation. That his application for employment with you is the result of such a study should be considered a compliment to your firm.

Today, more than ever before, students are being urged by occupational counselors and teachers to make a careful study of prospective employers. While the old "shot-gun" method of spraying the field in the hope of hitting *a* job has its proponents, modern counselors suggest that the prospective employee screen the field carefully, concentrate on a few selected firms representing the type of work he wants, and then aim for the bull's-eye.

Progressive firms, too, apparently favor this method, for many of them have gone to considerable expense to publicize the job opportunities they offer. Recently the U. S. Department of Labor, in cooperation with the Veterans Administration, published its *Occupational Outlook Handbook* (Bulletin No. 940), designed to furnish employment information on several hundred major occupations. Many books, brochures, letters and articles have also been written on the subject. The result of all this effort seems to point to a greater savings for employers, although losses involved in employee training in 1948 were staggering. In a survey conducted by Robert N. McMurry & Co., of 1,167 college trainees employed by 247 companies, 42 per cent left their jobs before the end of the first year of employment. The turnover is estimated to have cost the companies $1,300,000.

To eliminate this appalling waste, employment managers will need to define job openings even more carefully than in the past, and students will need to make a more thorough analysis of the jobs they want and are qualified to fill. While the "shot-gun" method may get the applicant *a* job,

the "rifle" method is more likely to get him *the* job—and at a greater saving of time and talent, money and effort for all concerned.

By the same token, an applicant who has spent the better part of his life preparing for a job should expect and receive a more friendly and courteous reception of his application than some firms accord it.

HAVE YOU SAVED THE APPLICANT'S GOOD WILL?

Employment managers pride themselves on their ability to spot at a glance the form letter that reveals the use of the "shot-gun" method of application. They should also be able to recognize the letter of the serious applicant who has made a careful job analysis. In either case, an effective turndown will build good will. To the applicant who uses a form letter, nothing is lost by replying in a tactful and courteous manner; to the applicant who has worked out a complete job analysis before he selected your firm, much is to be gained by the exercise of judgment and tact in the letter refusing him employment. In either instance an effort should be made to maintain the good will that prompted the applicant to write you.

To do this effectively, put some warmth in the tone of your letter; be friendly and tactful. If the applicant were face to face with you across your desk, would you say to him, "Please be advised that at this time we do not have an opening for you," or "For your information, this Company (with a capital C) has no openings at the present speaking"?

Start with the salutation—make it personal and friendly. A sure-fire killer is the "Dear Sir" salutation, particularly after the applicant has searched for days to find your name in order that he could use a personal salutation in addressing his letter to you. The worst practice from the standpoint of public relations is the use of a printed form, usually a card, announcing in 18 point, all caps—WE REGRET TO INFORM YOU THAT WE HAVE NO VACANCIES AT THE PRESENT TIME. No inside address, no salutation, no note of thanks, no signature. As an applicant recently remarked on receiving one of these monstrosities, "No nothing!" And then, in the next breath, "I'll never buy another ——— of their ——— products as long as I live."

If the number of your applicants is so large that you feel you must use a form letter, at least fill in with a matching inside address and a personalized salutation. And use a cordial complimentary close—always. Sign or have someone sign the letter. Avoid a rubber-stamp signature or a typed signature standing alone. No firm is so busy that it can afford to alienate customers or friends. Your applicant may be either or both.

You may be able to ease your own conscience by evasive tactics in turning down an applicant, but you should give him credit for being able to recognize the usual brush-offs. Avoid them. Here are a few examples:

> We are keeping your application in our files for future reference.
>
> * * *
>
> Unfortunately, there are no openings at present. However, we shall be glad to keep your application on file although I am afraid there is very little likelihood of any openings in the very near future. Should

one occur, rest assured that your application will be given every consideration.

* * *

Whether there are any openings for which you could properly be considered at this time, of course, depends on conditions in the departments in which your qualifications can be most useful.

This is to advise you, therefore, that I am referring your application to the appropriate officials and should there be any openings, you may expect to hear further in this regard.

* * *

In contrast, note the following:

We shall retain your employment forms in our files for a period of 12 months, and should a change in the employment situation provide an opportunity for us to reconsider you for work here, you will be notified promptly.

* * *

We appreciate having the opportunity to study your résumé, which we are returning to you.

MAKE YOUR TURNDOWNS CONSTRUCTIVE

If you can't maintain the applicant's good will, try to maintain his respect! Remember, too, that you have nothing to gain by belittling the applicant's qualifications or making him feel cheap, either openly or by innuendo. Maybe his letter isn't the best you have seen, or perhaps his qualifications are average or below average. Since you aren't going to hire him anyway, is any purpose served by making him feel bad? When you do have a suggestion or two that may improve his chances for employment elsewhere, make them in a constructive manner, not in the manner exemplified in the following sentence from a letter received recently by a veteran:

With a wife and two children, I don't see how you ever felt you were qualified to take a job like this.

Finally, express the wish that the applicant will find satisfactory employment. It doesn't cost a thing to express such a wish, and it leaves the applicant in a pleasant frame of mind. Furthermore, you undoubtedly would say something of the kind if you were face to face with the applicant, so why not say it in your letter?

Although we cannot offer you employment, we sincerely hope that you will be successful in finding suitable employment elsewhere.

* * *

We feel certain, however, that you will have little difficulty in finding the employment for which you are so well qualified, and we wish you every success in obtaining the position you want.

Not long ago a well-qualified applicant submitted identical letters of application and personal data sheets to two firms engaged in the same business. Here are the actual replies he received.

From firm A:

Reference is made to your letter of application dated April 15. We regret to advise you that we do not have a position open for you with our Company.

From firm B:

It is a pleasure to receive your letter of application and to express our appreciation for your interest in joining our organization.

Since we can place only a small percentage of the graduates who are applying to us, we have been asked by our management to express regret that we shall not be able to offer you employment following graduation.

Thank you again for the confidence in our company which your application denotes. Since we cannot invite you to come with us, permit us to wish you every success in making a connection elsewhere that will prove entirely to your liking.

CONCLUSION

In your letters turning down an applicant for employment:

1. Show the reader that you consider his application a sincere compliment to your firm.
2. Try to maintain the good will that prompted the applicant to write you.
3. Put some warmth in the tone of your letters; be friendly and tactful.
4. Avoid giving the reader the impression that you are giving him the brush-off; try to maintain his respect.
5. Do not belittle the applicant's qualifications or make him feel cheap either openly or by innuendo.
6. Express the wish that the applicant will find satisfactory employment elsewhere.

A SURVEY OF TIME-STUDY PRACTICES

By SEBASTIAN B. LITTAUER *
and
ADAM ABRUZZI **

"Time study," in the words of William Gomberg, "stands at the bridgehead of the social and physical sciences, involving the very intimate relationship between man and the tools which he uses." This thoughtful observation summarizes the manifold reasons why personnel managers as well as mechanical engineers must keep themselves abreast of current procedures and emerging trends in this dynamic field. The following article presents the results of a recent survey of prevailing time-study practices. This study comprises one phase of a current research project on time-study methods under way in the Department of Industrial Engineering, Columbia University.

INTRODUCTION

THIS study of modern time-study practices was developed largely from the conviction that those in time study and associated work are keenly interested in the practices of their professional colleagues. In more specific terms, it is intended to show which aspects of time-study work reflect a general uniformity of attitude and procedure, and which reflect significant differences of attitude and procedure. Other definite objectives are to ascertain the reasons for the most important practices reported, and the areas of time-study work in which exist useful practices not yet reported in the literature of the subject.

Space limitations do not permit the presentation of the questionnaire form used to develop this summary.[1] They also prohibit presentation of some of the less essential but nevertheless informative aspects of the reported results. The result is that this article will be restricted to the material pertaining to key topics, with interpretive material reduced to a minimum.

In general, no attempt was made to select a particular type of industry or to cover a particular geographical area. Forms were transmitted to 325 plants (and to a limited number of consultants and teachers) having sufficient background and interest in this field to participate in a survey of this kind. In all, 91 replies were received in what the authors consider to be a gratifying over-all response rate of approximately 28.0 per cent. Of this total, 66 returned the form at least 75 per cent filled out; three others sent in material based on the survey questions, but chose not to use the form. It is noteworthy that 12 of the remaining 22 plants did not use time-study practices, and would therefore not be expected to participate in this project.

It may be useful to outline briefly the wide variety of the industries and products covered by this survey. They include steel products, rubber products, electrical equipment, radios, cosmetics, textiles, glassware, plastics, meters, paper products, automobiles, watches, rugs, furniture, and women's wear.

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** Mr. Abruzzi is a practicing management consultant. The above study was undertaken as part of his work as a candidate for a Ph.D. degree at Columbia University.
[1] Those who desire a copy of this form, for the purpose of a more detailed analysis of this summary, may obtain one from Professor S. B. Littauer, Department of Industrial Engineering, Columbia University.

One additional point remains to be made before the survey itself is discussed. Unlike most surveys of this general type, the results are not stated in the percentage form, as in the following: 10 per cent of the plants favor plan A. Instead, actual counts have been reported in order to avoid creating the misleading impression that the results have statistical meaning with respect to the general industrial population. Rather, the results should be considered only to be indicative of the practices of what seems to be a fairly representative segment of that population.

I. GENERAL CHARACTER OF PLANT AND INDUSTRY

Replies to the question regarding the approximate number of the company's productive employees indicated that 28 plants out of the total of 58 reporting had less than 1,000 employees, while seven plants had between 5,000 and 25,000. On the related question as to the percentage of such employees in trade unions, 32 plants reported 90 per cent or more and only 8 plants reported none.

A question on payment policy found 39 plants reporting the use of wage-incentive plans; 20, piece-rate plans; and 22 day-rate plans.[2] The related and final question in this group showed 49 plants using job-evaluation plans, 26 of them in conjunction with merit-rating plans.

II. PERSONNEL ASPECTS OF TIME-STUDY WORK

The average number of men engaged full time in time-study work in the 28 plants with 1,000 productive employees or less was reported to be 1.65, with 17 reporting none and one reporting as many as 18. In the same plants, the average number of part-time men was reported to be 3.41, with two reporting none and one as many as seven.

The average number of full-time men in the 30 plants with more than 1,000 productive employees, however, was reported to be 16.07, with seven reporting none and one reporting as many as 110. In the same plants, the average number in the part-time category was 7.38, with seven reporting none and one as many as 18.[3]

Table 2.1 shows the frequencies and the corresponding number of years of college training and of shop experience considered to be essential in time-study work.

TABLE 2.1

College Training		Shop Experience	
Freq.	*Years*	*Freq.*	*Years*
15	4	7	Over 3
1	3	4	3
13	2	15	2
1	1	12	1
5	Unspecified	1	Under 1

[2] The total of 81 in the three classes mentioned illustrates the fact that the classes or groups outlined in most of the subsequent paragraphs are not exclusive or non-overlapping. For example, the fact that a plant uses a piece-rate plan in one division does not preclude the use of a day-rate plan in another.

[3] Inasmuch as type of plant is probably somewhat more closely correlated to the number of time-study engineers, this material should be considered as providing only qualitative, indicative information. Convincing evidence of this is the fact that the ratio of engineers to productive employees varied from one in 50 to one in 350.

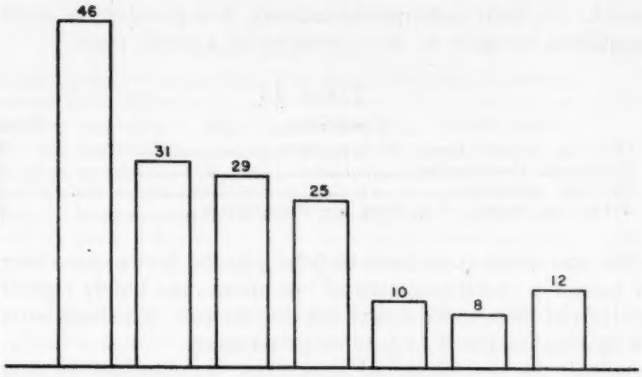

Chart 1

It should be emphasized that most of the statements made regarding college training indicated that it was desirable or valuable, rather than necessary. In fact, five respondents phrased their comment in just such qualitative terms. In addition, 26 plants reported that shop training courses, the third itam covered by the question, do provide desirable background for time-study work. Little agreement exists regarding the optimum duration of these courses, however, for the recommended length varied from three months to two years.

A check list asking whether training should be obtained in six selected subjects led to Chart 1, which shows the frequencies associated with each of these subjects in the following order: mathematics, statistics, psychology, education, sociology, and physiology The final entry represents the frequency with which additional subjects were indicated.

The criteria used to decide when a trainee is capable of taking reliable time studies have been collected into groups and recorded on Table 2.2 according to the number of times they were mentioned.

TABLE 2.2

Group Description	*Frequency*
1. Check practice studies against approved studies, such as standard data on the same or similar operations	22
2. Check rating or leveling results against those of experienced engineers or with standard films; the proven ability to rate or level	22
3. Compare over-all results with those of an experienced engineer	13
4. Work under direct supervision of experienced engineer for a stipulated period (e.g. 6 months)	11
5. Accurate, complete results; knowledge of factory operations	8
6. Miscellaneous	5

III. THE FUNCTION OF TIME AND MOTION STUDY

Where time study and motion study were used jointly, the conditions under which motion studies were made and their frequencies are summarized

in Table 3.1. As their descriptions indicate, it is possible for more than one set of conditions to apply to the operations of a single plant.

TABLE 3.1

Conditions	*Frequency*
Only on certain classes of operations	26
Before all time studies	24
On new operations	22
When the results of a study are inconclusive	14

Among the operations considered to belong to the first group covered by the table are assembly operations, manual operations, and highly repetitive operations. In each of these cases, it was felt that the cost of making motion studies would be justified in terms of long-range economy.

Regarding the percentage of operations standardized in advance with respect to methods, 51 plants gave percentage estimates which are summarized graphically on Chart 2.

A check list was used to determine why methods of operation are not standardized in advance in those cases where this procedure is not followed. The items checked and the number of times they were mentioned are recorded on Table 3.2.

TABLE 3.2

Reason	*Frequency*
Inability to standardize all jobs in advance	29
Standardization can be attained through time studies	24
Excessive costs of standardization	10
Necessity to standardize only key operations	7
Other reasons	6

Considerable differences were found to exist among the qualitative criteria presented for deciding when an operation can be considerd standardizd with respect to method. Insofar as possible, these criteria have been assembled into homogeneous groups as recorded on Table 3.3, which also shows the number of times the criteria in a given group were mentioned.

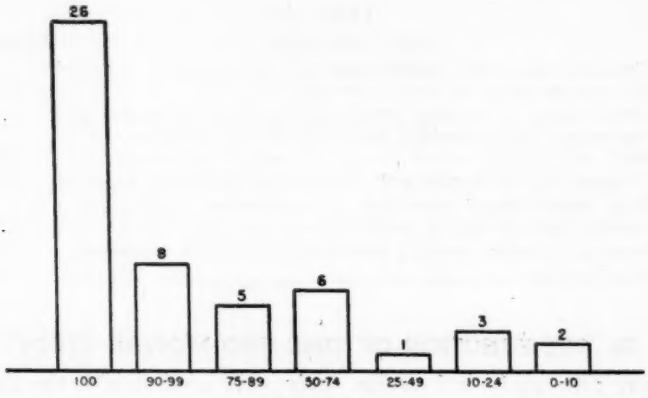

Chart 2

TABLE 3.3

Group Description	*Frequency*
1. All obvious improvements have been made; Principles of motion economy fully applied	18
2. Operating procedure is fully applied, including methods, equipment, and materials	16
3. Operation controlled with small variations; Operation running smoothly and delays minimized	12
4. Operation in close agreement with time standard; Quality standards are being met	16
5. Performance results; Judgment of foreman	4

In addition to these, the observation was made in three cases that the process of standardization is continuous, and that the goal of complete standardization is an ideal never realized.

IV. TIME-STUDY PROCEDURE

A question concerning types of timing devices used brought a total of 62 replies. Of these, 45 reported that the stop-watch was used on 100 per cent of their operations; 10, that it was used on 90 per cent to 99 per cent of their operations; and two, that it was used on 85 per cent of their operations. Where less than 100 per cent was reported, standard data, the motion picture camera, the marstochron, an automatic electrical recorder, and other speed indicators were used to supplement the stop-watch. In one case, published tables of standard elemental times were used on all operations, thus apparently eliminating the need for any timing device.

The next two questions might well be considered jointly, for they are both concerned with the "efficiency" of the stop-watch as a measuring instrument. Quantitative estimates of how close a reading on a stop-watch could be expected to come to the "true" reading in terms of minutes are plotted on the unshaded portions of Chart 3, which also shows the associated frequencies. Corresponding estimates of how closely additional readings can be expected to duplicate the first reading (if a series of readings on the same

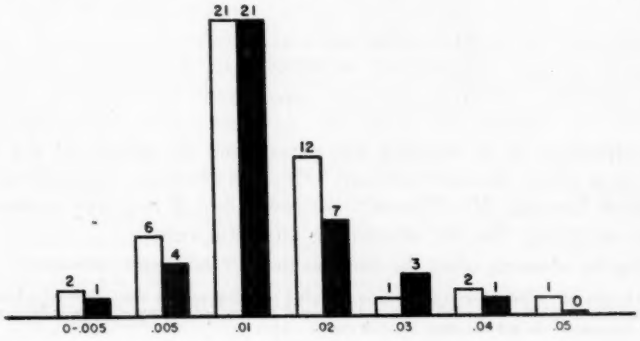

Chart 3

cycle could be obtained) are also shown in terms of frequency on the shaded portions of the same chart.[4]

In addition to these, four plants answered the first of these two questions in terms of percentages, all of which fall between 5 per cent and 10 per cent, inclusive. Similarly, five plants reported percentages in their answers to the second question; all but one of these is less than 10 per cent.

A total of 60 replies was received on the question of whether the ability to read a stop-watch correctly depends on the length of the elements involved and on the relation between them. Of these, 49 plants answered yes and 11 answered no. The associated question as to whether an error arises because of the inability of the observer to set up absolutely constant "break-points" also received 60 replies, of which 51 were yes and nine were no.

The next question regarding the effect of the appearance of "foreign elements" on the ability to evaluate "break-points" brought a wide variety of replies. Of a total of 60, 38 indicated that some effect did exist, which the other 22 denied. Among those holding the former view, 15 felt that this effect was disturbing, but that its practical implications could be minimized by good engineers. The other 23 in this group found, however, that this effect could be great enough to lead to "abnormal" readings, especially with small elements. In contrast, those holding the negative view felt that a competent and alert observer could cancel out the effect of "foreign elements."

On a check question with two parts, 60 plants agreed that elemental breakdowns are intended to help detect undesirable and excessively long elements and otherwise improve methods of operation. It was also agreed by 57 of these respondents that the breakdowns are also intended to help set a master table of elemental times for use as standard data.

The question was then raised regarding the risks of error involved in using standard data to predict time standards for new operations. Here 46 held the view that some risk of error does exist, while 11 held that such risks could be avoided. In the first group, 19 provided estimates of the (±) magnitude of this error in percentage terms as recorded on Table 4.1.

TABLE 4.1

% Error	*Frequency*
3	1
5	7
8	1
10	2
15	3
20	3
50	2

The question as to whether the nature and the length of the elements adjacent to a given element have any effect on the time required to perform that element brought 50 affirmative answers and 8 negative answers. The chief reasons given for the affirmative answers were:

a. fatiguing elements affect the time required for subsequent elements

[4] Putting both sets of estimates on one chart is intended to bring out the close similarity between them. Direct comparisons of the recorded frequencies should be avoided, however, especially since the total number of frequencies is not the same in each case.

b. the tempo, the rhythm, or the motion pattern changes, which may make it more difficult to perform other elements
c. the relationship among the elements changes
d. changes in direction, in distance, or in weight affect elemental times
e. the psychological effect of habit formation

The question as to whether a change in the sequence of elements would be expected to have an effect on the results of a time study prompted a total of 58 replies, 50 affirmative and eight negative. Substantially, the reasons offered in support of the affirmative position are based on the view that appreciable changes (often in the form of improvement) in the method, the motion pattern, the rhythm, or the pace of an operation may accompany a change in the sequence of elements.

V. PHYSICAL DETAILS

The principal procedures reported to be used for determining the elemental breakdown of an operation are shown on Table 5.1, which also indicates the number of times each was mentioned.

TABLE 5.1

Procedure	*Frequency*
1. Natural and definite "breaks," e.g. sound, motion, etc.	15
2. Breakdown into constant and variable element groups	15
3. Smallest elements consistent with accuracy	14
4. Observer's judgment	14
5. Breakdowns are compared to those of similar jobs	5
6. Breakdowns are compared to those on standard tables	5
7. Other procedures	5

A wide variety of viewpoints were expressed on the question as to which vocational characteristics are desirable in a worker to be studied. These were collected into related groups and recorded on Table 5.2 with the corresponding frequencies.

TABLE 5.2

Characteristics	*Frequency*
Steady pace—Average skill and effort	28
Average and experienced—Approximately normal	26
Fully trained—Follows method	26
At least average performance—At least average skill and effort	9
Neither exceptionally fast or slow	7
Work of quality	3

The respondents expressed an even wider variety of viewpoints regarding the personal characteristics which are desirable in a worker to be studied. These are presented on companion Table 5.3, on which related viewpoints are grouped and recorded together with their frequencies.

TABLE 5.3

Characteristics	*Frequency*
Cooperativeness—Willingness	44
Calm—Emotionally Stable	15
Neat—Punctual—Attentive	3
Interested in Work—Alert—Intelligent	11
Confidence in management and in time study	5
No preference	4

VI. TREATING THE OBSERVED DATA

A large number of distinct criteria were reported for determining the number of complete cycles required to attain reliable results, which suggests that the choice of a given criterion depends to a large extent on the conditions peculiar to the individual plant. To simplify the problem of interpretation, it was nevertheless necessary to collect those criteria into the groups shown on Table 6.1, which are intended to be as nearly homogeneous as possible.

TABLE 6.1

Group Description	*Frequency*
1. Judgment on sufficiency of readings; Past experience on similar operations	22
2. Consistency of results; Sufficient repetitions of certain readings	22
3. Length of elements; Length of cycles	21
4. Nature and complexity of the operation; Experience of workers	13
5. Quantitative estimates of the minimum or the average number of readings (or of the amount of time to be taken)	12
6. Length of run; Cost and repetitiveness of the operation	5

The question regarding the measures (statistics) used to summarize a set of observed time-study readings is covered graphically on Chart 4, which shows the frequencies corresponding to the arithmetic average, the arithmetic average (after discarding exceptional readings), the median, the mode, the selected time, and the typical time, in that sequence.

A compilation of the views expressed on this question showed that the continuous method of taking readings was used exclusively in 35 cases, while the snap-back method was used exclusively in 15 others. In 17 cases, both methods were applied, with the choice for particular operations based on the nature and the length of the elements, etc.

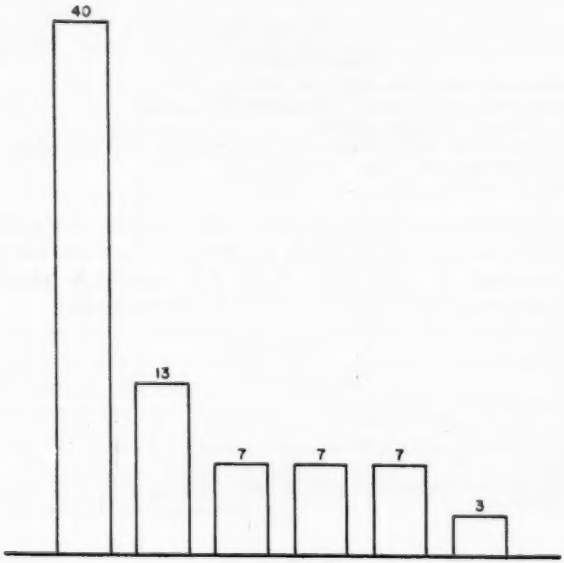

Chart 4

Respondents' principal reasons for preferring the continuous method are that it gives a much more complete record of what occurs; it accounts for all the elapsed time; it involves less chance of error; and it is easier to explain. On the other hand, their principal reasons for preferring the snap-back method are that it saves time by minimizing computations; it is sufficiently accurate; and it simplifies the detection of unusual times and "foreign elements."

VII. RATING AND ALLOWANCES

The principal procedures reported in use for rating or leveling workers are tabulated on Table 7.1, which also shows the number of times each was mentioned. It should be emphasized that in most of these categories, some cases exist in which appreciable modifications have been made in the published procedures.

TABLE 7.1

Procedure	*Frequency*
Speed rating (100%) plan	33
Leveling of skill, effort, etc	14
Point hour system	6
Shumard performance rating method	2
Miscellaneous	6

The associated question as to whether the rating (or leveling) procedure is applied to individual elements or to the total study was answered by 66 plants. Of these, 30 applied the procedure primarily to individual elements. In 26 other cases, it was considered to be largely optional with the engineer as to whether the rating procedure was applied to individual elements, the total study, or both. In another group of eight cases, the rating procedure was applied primarily to the total study.

The next set of three questions should be considered jointly, since they are all concerned with the estimated "efficiency" of the rating (or leveling) procedure. Accordingly, the (±) percentage estimates received in response to each of these questions are plotted on Chart 5, which also gives the corresponding frequencies. [5]

More specifically, 50 estimates of how closely the rating procedure comes to the "true" value of a worker's performance are plotted on the shaded portion; 52 estimates of how closely the results of a rating procedure would agree, if the same worker were evaluated more than once by the same observer, are plotted on the dotted portion; and, finally, 49 estimates of how closely such results would agree, if the same worker were evaluated by different observers, are plotted on the balance of the chart.

The next question was concerned with whether the concept of a normally skilled worker used in the rating (or leveling) procedure was based on plant standards or on industry standards. On this, 45 plants reported using a plant standard; 16, an industry standard; and five, a composite standard based on both plant and industry.

To establish allowances, production (or interruption) studies were used by 45 plants, 10 of which also used ratio-delay studies under certain conditions. Only two plants, however, used ratio-delay studies exclusively for this

[5] Cf. footnote 4.

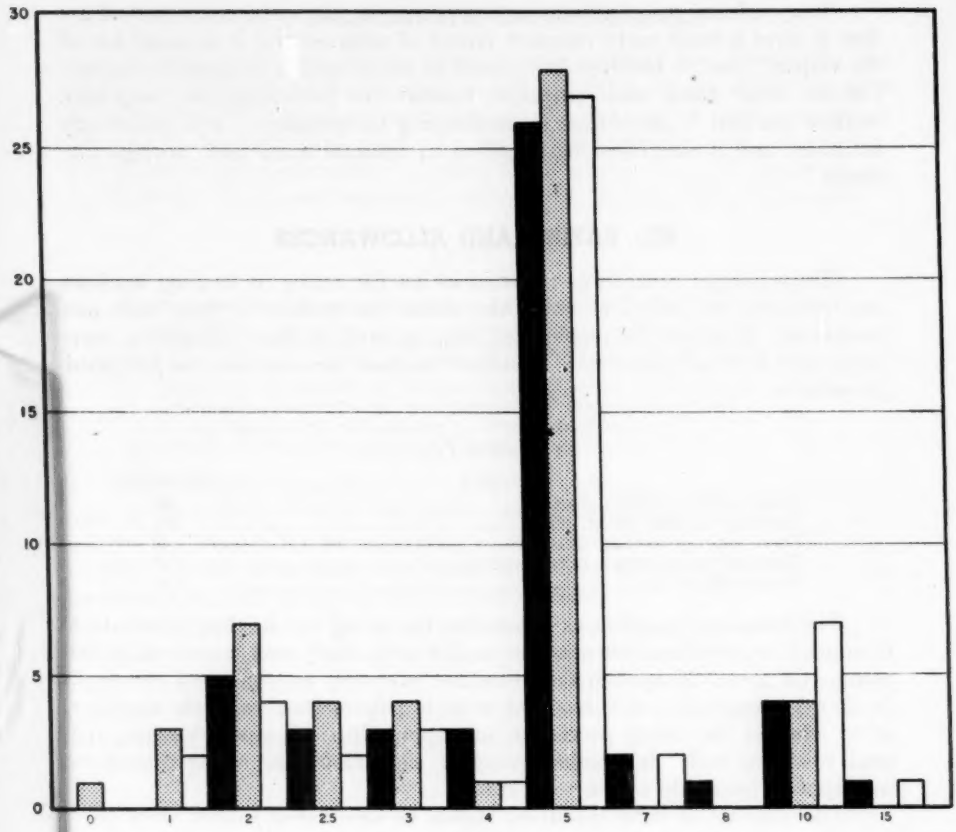

Chart 5

purpose. In 16 more plants, other methods of establishing allowances were used either independently or in conjunction with those already mentioned. Prominent among these was the use of published tables for various allowance factors; reliance on the judgment of the time study engineer; and contractual agreements between management and labor.

The answers to a question asking which of four common types of allowances were used are presented in frequency form on Table 7.2.

TABLE 7.2

Allowance Type	*Frequency*
Machine delay	49
Set-up	41
Fatigue	51
Personal	56

One or more additional types of allowances were also specified by 21 plants. These include allowances for interference, tool grinding, machine oiling, material handling, and contingencies.

A HUMAN RELATIONS READING LIST

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Professor of Public Administration
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THE following annotated reading list was prepared at the request of the editors, who had read similar bibliographical comments prepared for the author's individual teaching purposes and classroom use. These works have been read and digested in an effort to discover a synthesis between basic knowledge about man and society, on the one hand, and orthodox management ideology on the other. The list is confined to books, monographs, and pamphlets, thus excluding the very extensive periodical literature.

It is not claimed that these volumes constitute a discriminating selection of the "best books," for probably many other books are just as worthy of inclusion. Perhaps the most that should be claimed for the titles listed below is that they seem to emerge, in the writer's view, as those which have contributed to his thinking. A few of these items would undoubtedly appear in any well-rounded listing and should possibly be so identified. On second thought, however, it seems better to permit the reader to decide for himself which are significant for his purposes.

Specialists in such disciplines as psychology, sociology, and anthropology will probably find serious omissions and question the advisability of an attempted synthesis in fields where even the specialists find their knowledge inadequate. The answer is that someone must be rash enough to attempt synthesis. It is the writer's firm belief that the answers to the human problems which perturb progressive management are to be found only through the scientific method applied to the study of man in the same manner that industrial research has answered production problems, and marketing research has improved the distribution of goods. The social sciences have not yet achieved the same maturity as have physics or chemistry, but they have developed a body of information which is not yet sufficiently utilized by management. The following books should give some insight into that body of knowledge.

GENERAL

DRUCKER, PETER F., *Concept of the Corporation.* John Day Company, New York, 1946. 297 pp.

A report on an eighteen-months' study of the managerial policies and organization of the General Motors Corporation, conducted by the author as an outside consultant. See especially Chapter III, "The Corporation as a Social Institution."

HOSLETT, SCHUYLER DEAN, *Human Factors in Management.* Harper and Bros., New York, 1946. 322 pp.

A well-selected anthology of articles and excerpts from books by authors with varying experience and background.

MACCURDY, J. T., *The Structure of Morale.* The University Press, Cambridge, England, 1943. pp. 163-167.

Lectures given to leaders of troops by a British biologist. Pages listed above refer

to passages dealing with the analogy between biological and social organisms. They imply that evolution (experience) may produce in management organizations the same type of automatic coordination developed by the central nervous system.

MARX, FRITZ MORSTEIN (Ed.), *Elements of Public Administration.* Prentice-Hall, Inc., New York, 1946. 637 pp.

This splendid symposium contains several sections dealing with the human side of management, particularly Mansfield and Marx's "Informal Organization"; Reining on "Supervision"; and Sayre on "Morale and Discipline."

NILES, MARY CUSHING (HOWARD), *Middle Management.* Harper and Bros., New York, 1941. Revised Edition, 1949. 274 pp.

A pioneer study of the job of the "junior" administrator.

PULESTON, CAPTAIN W. D., U. S. N., *Mahan: The Life and Work of Captain Alfred Thayer Mahan.* Yale University Press, New Haven, 1939. 380 pp.

From a management standpoint, this book is of interest because it demonstrates the maladjustment of intellectuals in organizations dominated by "action" people. Despite Mahan's gigantic stature as historian and world strategist, he was a generation ahead of his time in his efforts to introduce staff planning, research and post-graduate education for officers.

ROETHLISBERGER, F. J., *Management and Morale.* Harvard University Press, Cambridge, 1941. 194 pp.

A series of collected lectures. This book should not be confused with the author's earlier work, listed immediately below, which is the definitive description of the Western Electric experiment.

ROETHLISBERGER, F. J., and DICKSON, WILLIAM J., *Management and the Worker.* Harvard University Press, Cambridge, 1939. 615 pp.

The methods and results of one of the most widely publicized experiments in the social sciences are set forth here in great detail. The latter part of the book would be important as pure social science, even if entirely separated from the experiments themselves. This is *the* most important book to read on the Western Electric experiment. All others are subsidiary to it.

ANTHROPOLOGY AND SOCIOLOGY

During the next several years, the literature on organization and management will be based increasingly on the concepts and research findings of anthropology, sociology and social psychology. It is difficult to tell precisely where one of these disciplines begins and the other ends, but it seems fair to say that the cultural anthropologists have given far more emphasis to field studies and the analysis of culture. The contribution of cultural anthropology to management would seem to flow from three factors: (1) a methodology of field study which analyzes human behavior from the standpoint of total environment; (2) the culture concept which helps to explain the non-rational actions of human beings; and (3) a method of observing and describing institutions which gives to common things a significance often overlooked by those who live with them. Thus far, the anthropologists have devoted their attention predominantly to primitive and pre-literate peoples, but we now see them becoming interested in our own more complex societies.

Perhaps it would facilitate understanding to indicate briefly how some of the works below are related to problems of management. Ruth Benedict presents descriptions of several cultures, in two of which the motivation of individuals is the opposite: one emphasizes competitiveness and struggle for ascendancy; the other (Pueblo) emphasizes cooperation, frowning on one person's efforts to demonstrate superiority over his neighbor. To turn to another group of studies, Gardner's description of the social system of a

factory and Whyte's study of restaurants present management sub-cultures within our larger American culture. They demonstrate that these sub-cultures have many characteristics in common, yet they differ. As more and more of such studies are made in different types of management institutions, we shall be able to generalize more safely in such areas as organization (both formal and informal), human relations, and motivation.

BENEDICT, RUTH, *Patterns of Culture.* Houghton-Mifflin Company, New York, 1934. 290 pp.

Now available in the paper-covered, inexpensive Penguin edition. The writer has frequently been asked to elaborate on his frequent insistence that social anthropology has made and can make an important contribution to the understanding of the human problems of management. The implications of this remark are not easily conveyed in a few sentences but must grow upon one with gradual introduction to the literature of anthropology and personal association with anthropologists. The fundamental approach of social anthropologists is the study of cultures by means of first-hand field observation. This semi-popular work by a social anthropologist will furnish an introduction to what anthropologists are thinking about and the manner in which they conduct their studies. For a more direct application of anthropological science to management, see works of Burleigh B. Gardner, W. Lloyd Warner and Eliot D. Chapple.

BOAS, FRANZ, *Race, Language and Culture.* The Macmillan Company, New York, 1940. 647 pp.

A collection of the writings of the eminent anthropologist.

CHAPPLE, ELIOT D., "Anthropological Engineering: Its Use to Administrators," in Schuyler Dean Hoslett's *Human Factors in Management.* Harper and Bros., New York, 1946. pp. 266-284.

An interesting paper by one who has pioneered in the use of the anthropological method in solving management problems.

CHASE, STUART, *The Proper Study of Mankind: An Inquiry into the Science of Human Relations.* Harper and Bros., 1948. 311 pp.

Mr. Chase makes a strong plea for two developments needed in the social sciences, the "hard core" of which embraces: (1) cultural anthropology, (2) social psychology, (3) sociology, (4) economics, and (5) political science. First, it is urged that these disciplines adopt the scientific method, which the author defines, indicating in what respects the traditional approaches of natural science must be adapted to the study of social phenomena and social data. Second, there must be a breaking down of existing isolation and compartmentalism among the social sciences for the achievement of integration and collaborative effort.

COOLEY, CHARLES HORTON, *Social Process.* Charles Scribner's Sons, New York, 1918. 430 pp.

The chapter on groups presents the basic theory on that subject to which most contemporary writers on sociology refer.

COON, CARLETON S., *A Reader in General Anthropology.* Henry Holt and Company, Inc. New York, 1948. 624 pp.

Classifies societies into seven levels on the basis of complexity, observing that hierarchies begin at the fourth level. A symposium of readings interspersed with Coon's own comments. The editor's appendix serves as a brief introduction to the thought and method of anthropology.

GARDNER, BURLEIGH B., *Human Relations in Industry.* Richard D. Irwin, Inc., Chicago, 1945. 307 pp.

An extremely readable textbook by an author who spent several years as Director of Industrial Relations Research at the Western Electric Hawthorne Plant. Highly recommended reading.

GILSON, MARY BARNETT, *What's Past is Prologue.* Harper and Bros., New York, 1940. 307 pp.

The experiences and personnel philosophy of one of the first women directors of personnel. She worked in the Cleveland garment industry early in her career and later became a teacher at the University of Chicago.

HERSKOVITS, MELVILLE J., *Man and His Works.* Alfred A. Knopf, New York, 1948. 678 pp.

A comprehensive text in cultural anthropology. Because of the newness of the science and of the preoccupation of anthropologists with their field studies, the general texts on this subject have been few.

KARDINER, ABRAM, *The Psychological Frontiers of Society.* Columbia University Press, New York, 1945. 475 pp.

A psychiatrist analyzes the field notes of anthropologists who have studied several cultures, including one hillbilly culture in America. Tests the hypothesis that a given culture produces a basic personality pattern.

LEIGHTON, ALEXANDER HAMILTON, *The Governing of Men.* Princeton University Press, Princeton, 1945. 404 pp.

One of the most important books in recent years on the social aspects of management. Written by a distinguished psychiatrist and anthropologist, it is an account of several months spent at the Japanese Relocation Center at Poston, Arizona. Of particular interest to those in management are the principles which Dr. Leighton develops in this study.

LINTON, RALPH (Ed.), *The Science of Man in the World Crisis.* Columbia University Press, New York, 1945. 532 pp.

A symposium in which the contributors are anthropologists, biologists and representatives of other sciences which study man. The selections on culture should be of interest to those who are attracted by the cultural approach to the study of management.

MACIVER, ROBERT M., *The Web of Government.* The Macmillan Company, New York, 1947. 498 pp.

This book may have a formidable title to many industrial readers; however, it is one of the most distinguished and scholarly contributions to social science in recent years, having been awarded the Woodrow Wilson prize in 1947. It has been included here because of its penetrating synthesis of anthropology, sociology, history and political philosophy in the discussion of authority, power, status and the dynamics of social organization.

MALINOWSKI, BRONISLAW, *A Scientific Theory of Culture, and Other Essays.* University of North Carolina Press, Chapel Hill, 1944. 228 pp.

The late eminent anthropologist presents a theory for the study of man based upon years of scientific field investigation.

MAYO, ELTON, *The Social Problems of an Industrial Civilization.* Harvard School of Business, Boston, 1945. 150 pp.

Summarizes the mature thinking of one of the foremost authorities on the social aspects of management. The chapter on absenteeism and labor turnover summarizes the results of a series of field studies which emphasize the importance of teamwork.

MORENO, J. L., *Who Shall Survive? A New Approach to the Problem of Human Relationships.* Nervous and Mental Disease Publishing Company, Washington, D. C., 1934. 440 pp.

Of interest chiefly because of its methodology for analyzing groups and depicting results graphically.

REDFIELD, ROBERT, *The Folk Culture of Yucatan.* The University of Chicago Press, Chicago, 1941. 416 pp.

Discusses the anthropologist's concept of culture. Also describes four cultures of descending complexity, beginning with that of the urban and metropolitan capital of Merida to the jungle folk societies 200 miles away.

WARNER, W. LLOYD, and LUNT, PAUL S., *The Social Life of a Modern Community.* Yankee City Series, Vol. I, Yale University Press, New Haven, 1941. pp. 81-91.

The first of six volumes, four published and two in preparation, based on a study of the total social life of a New England industrial town. This volume is of interest because of its chapters on methodology and its postulation of six social classes. Volume IV deals directly with labor trouble in the shoe business.

WHYTE, WILLIAM FOOTE, *Human Relations in the Restaurant Industry.* McGraw-Hill Book Company, Inc., New York, 1948. 378 pp.

A study sponsored by the National Restaurant Association. Like all of Whyte's

works, it reflects his mastery of the methodology of field study. This methodology is explained in the appendix, but a more complete description is set forth in the article by Burleigh B. Gardner and William Foote Whyte, "Methods for the Study of Human Relations in Industry," *American Sociological Review* (October, 1946), Vol. 11, No. 5, pp. 506-512.

BIOLOGY

DUNN, L. C., and DOBZHANSKY, THEODOXIUS, *Heredity, Race and Society.* Penguin Books, Inc., New York, November, 1947. 115 pp.

Two Columbia University biologists write a popular work on the subjects indicated in the title.

HUXLEY, JULIAN, *Man in the Modern World.* The New American Library of World Literature, Inc., New York, August, 1948. 191 pp.

This is an example of how scientific thought, in this case in the field of biology, is tending to come to grips with social problems. In words understandable to the layman, Huxley deals with biological evolution, human genetics, and the issues involved in eugenics. Readers with a flair for the philosophy of science will be fascinated, if not convinced, by his insistence on fundamental differences in methodology in the search for truth as between the natural and social sciences.

SHELDON, W. H., *The Varieties of Human Physique; An Introduction to Constitutional Psychology.* Harper and Bros., New York, 1940. 347 pp. *The Varieties of Temperament; A Psychology of Constitutional Differences.* Harper and Bros., New York, 1942. 520 pp.

The published results of a psycho-biological study of thousands of cases. The main thesis is that we can be classified temperamentally on the basis of categories of body build. Aldous Huxley has written a popular synthesis entitled "Who Are You?" *Harper's Magazine,* (November, 1944), Vol. 189, pp. 512-522.

SCIENTIFIC MANAGEMENT

COPLEY, FRANK BARKLEY, *Frederick W. Taylor, Father of Scientific Management.* Harper and Bros., New York, 1923. Two volumes.

This is an official but friendly biography of the celebrated father of scientific management. It will give a warmer and more human perspective of the man than might be obtained merely from studying his management principles supplemented by the writings of his followers.

FILIPETTI, GEORGE. *Industrial Management in Transition.* Richard D. Irwin, Inc., Chicago, 1946. 311 pp.

An interesting history of the scientific management movement, abstracting the contents of a number of significant books on the subject. The first few chapters deal with the philosophies and approaches of Taylor, Gantt, and the Gilbreths.

TAYLOR, FREDERICK WINSLOW, *The Principles of Scientific Management.* Harper and Bros., New York, 1911. 144 pp. *Shop Management.* Harper and Bros., New York, 1911. 207 pp.

The above two principal sources of Taylor's writing are not for the most part concerned with human relations. They are listed here because of the tendency on the part of students of human relations to criticize the engineering, mechanical, and formal approach to management studies, attributed to Taylor's followers. The most ardent disciples of Taylor and those who knew him personally say that he was very human and extremely conscious of the personal problems of management. The student of human relations would do well to read from Taylor before criticising him and his followers too glibly.

TAYLOR, FREDERICK W., *Scientific Management.* Harper and Bros., New York, 1947. 638 pp.

A reprint in a single volume of three of Taylor's fundamental contributions: (1) *Shop Management;* (2) *Principles of Scientific Management;* and (3) the Taylor testimony before a special Congressional committee.

ORGANIZATION

ANDERSON, E. H. and SCHWENNING, G. T., *The Science of Production Organization.* John Wiley and Sons, Inc., New York, 1938. 282 pp.

A standard work on organization which reflects the training of the authors in basic economic theory.

BARNARD, CHESTER I., *The Functions of the Executive.* Harvard University Press, Cambridge, 1938. 334 pp.

One of the most widely known books on organization in recent years. The author was formerly president of the New Jersey Bell Telephone Company and is now president of the Rockefeller Foundation. Gives due attention to informal organization and psychological and social factors.

GLASER, COMSTOCK, *Administrative Procedure.* American Council on Public Affairs, Washington, D. C., 1941. 207 pp.

One of the most useful contributions to date on methods for studying and analyzing large-scale organizations.

GULICK, LUTHER and URWICK, L. (Eds.), *Papers on the Science of Administration.* Institute of Public Administration, New York, 1937. 195 pp.

The very widely known and used symposium on organization. It is a general work, most of the authors, except Gulick, having an industrial interest.

MANSFIELD, HARVEY C., and MARX, FRITZ MORSTEIN, "Informal Organization," in Fritz Morstein Marx (Ed.), *Elements of Public Administration.* Prentice-Hall, Inc., New York, 1946. pp. 294-313.

Two political science scholars who have worked in federal agencies discuss informal organization realistically from the standpoint of such experience.

SECKLER-HUDSON, CATHERYN, *Processes of Organization and Management.* Public Affairs Press, Washington, D. C., 1948. 296 pp.

A collection of writings by various authors from areas of both industrial management and public administration. Of particular interest are two 40-year-old papers on organization by Russell Robb, formerly of the Harvard Graduate School of Business Administration.

SIMON, HERBERT A., *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organization.* The Macmillan Company, New York, 1947. 259 pp.

A recent work on organization. Acknowledgement is made to Chester I. Barnard whose concepts relative to authority, decision-making and communication are discussed with general approval.

URWICK, L., *The Elements of Administration.* Harper and Bros., New York, 1943. 132 pp.

A useful little book by the well-known British authority.

FUNCTIONAL SUPERVISION

HODGSON, VIOLET (HOFFMAN) MRS., *Supervision in Public Health Nursing.* Commonwealth Fund, New York, 1939. 376 pp.

The supervision of persons working in the field, traveling without direct supervision, has been neglected as a field of management study. This is a substantial contribution to the problem of supervising field workers. In many respects, the problems of supervising salesmen and traveling service workers in business organizations are not substantially different from those encountered in supervising public health nurses and policemen.

JONES, THOMAS R., *Theories and Types of Organization.* American Management Association, New York, 1929, Production Series No. 83.

Of particular interest is an organization chart interpreting the duties and relationships of Taylor's functional foremen.

MACMAHON, ARTHUR W., MILLETT, JOHN D. and OGDEN, GLADYS, *The Administration of Federal Work Relief.* Public Administration Service, Chicago, 1941. 407 pp.

Industrial readers are urged not to shy away from this book because it deals with a somewhat unenticing subject. Its Chapter 11 is one of the best contributions to the subject of functional supervision in the literature of management.

SMITH, EDGAR W., *Organization and Operating Principles.* American Management Association, New York, 1930. General Management Series No. 112, 40 pp.

Describes how an extensive world-wide industrial organization, the General Motors Export Corporation, finds it necessary to provide channels of communication shorter than the line of command.

COMMUNICATION AND SEMANTICS

ALLPORT, GORDON W. and POSTMAN, LEO, *The Psychology of Rumor.* Henry Holt and Company, New York, 1947. 247 pp.

Develops certain generalizations relative to rumor, based upon experiment and controlled observation.

CHASE, STUART, *The Tyranny of Words.* Harcourt, Brace and Company, New York, 1938. 396 pp.

This is the well-known work which has probably done more than any other to popularize semantics.

DUNHAM, BARROWS, *Man Against Myth.* Little, Brown and Company, Boston, 1947. pp. 233-242.

Chiefly of interest here because it controverts the thesis of semanticists who contend that the clarification and simplification of language and words will produce cooperation among men.

FLESCH, RUDOLPH, *The Art of Plain Talk.* Harper and Bros., New York, 1946. 210 pp.

Examines the language to be used in order to reach and be understood by those at various reading levels.

HAYAKAWA, S. I., *Language in Action.* Harcourt, Brace and Company, New York, 1941. 243 pp.

A popular work widely used in the teaching of English in schools.

HERON, ALEXANDER, *Sharing Information with Employees.* Stanford University Press, Stanford, 1942. 204 pp.

A vice-president in charge of industrial relations for a large pulp and paper company sets forth his practical observations.

JOHNSON, WENDELL, *People in Quandaries.* Harper and Bros., New York, 1946. 532 pp.

This work by a clinical psychologist is the most satisfactory volume on general semantics.

KORZYBSKI, ALFRED, *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics.* Science Press, Lancaster, 1941. 806 pp.

The basic work of the modern prophet of general semantics.

MORRIS, CHARLES, *Signs, Language and Behavior.* Prentice-Hall, Inc., New York, 1946. 365 pp.

One of the most recent efforts to frame a logic and science of semantics. The popular reader should be warned that books purporting to deal with semantics on this basis are not easy going, and this volume is no exception.

MANAGERIAL DEMOCRACY

AIKIN, WILFORD M., *The Story of the Eight-Year Study.* Harper and Bros., New York, 1942. 157 pp.

The story of experiments with democracy in both teaching and management in a sampling of high schools in all parts of the United States. There are several subsequent volumes setting forth the detailed results, but this one tells the over-all story. It is really an experimental test of the "progressive" education concept, but that word is avoided because of its adverse connotations. The educational results of experimental schools are compared statistically with those of non-experimental schools, showing a slight superiority in most respects for the products of the former. Perhaps the chief value for the purposes of students of management is the actual experiences encountered in the introduction of democratic practices in the relationships between principal and teachers.

BARR, A. S., BURTON, WILLIAM H., and BRUECKNER, LEO J., *Supervision; Principles*

and Practices in the Improvement of Instruction. D. Appleton-Century Company, Inc., New York, 1938. 981 pp.

The opening chapters of this work set forth one of the finest philosophies of democratic management to be found in the literature of the subject.

BRAUN, KURT, *Union-Management Co-operation: Experience in the Clothing Industry.* The Brookings Institution, Washington, D. C., 1947. 259 pp.

A history of union participation in management problems in an industry where such participation has been accepted as normal practice and has approval of both management and labor.

DALE, ERNEST, *Greater Productivity Through Labor-Management Cooperation—An Analysis of Company and Human Experience.* American Management Association, Research Report No. 19, New York, 1949.

A study based on data drawn from the experiences of several hundred organizations.

FOLLETT, M. P., *Creative Experience.* Longmans, Green and Company, New York, 1924. 303 pp.

Miss Follett deals here with the psychology of the conference. Of particular note is her concept of circular response in inter-personal relationships.

FOLLETT, MARY PARKER, *Dynamic Administration: Collected Papers of Mary Parker Follett.* Compiled by editors Henry C. Metcalf and L. Urwick. Harper and Bros., New York, 1942. pp. 247-269.

These are the posthumously collected essays of one of the most remarkable women America has ever produced. Educated at Radcliffe, she became a social worker and was appointed to the Massachusetts State Labor Commission where she first came into immediate contact with management problems. These essays develop a social philosophy of management which in many respects foresees philosophically what social scientists are today beginning to prove empirically and experimentally.

GLADDEN, E. N., *Civil Service Staff Relationships.* William Hodge and Company, Ltd., London, 1943. 184 pp.

A British account of the organization and operatoin of the Whitley Councils.

HICKS, CLARENCE J., *My Life in Industrial Relations.* Harper and Bros., New York, 1941. pp. 41-63.

The very readable autobiography of the man who influenced John D. Rockefeller, Jr., to install—and who supervised the installation of—employee representation plans in American industry.

DE HUSZAR, GEORGE B., *Practical Applications of Democracy.* Harper and Bros., New York, 1945. 140 pp.

Creative and imaginative thinking, with concrete examples of the means of applying democracy in the work-a-day world.

MCCORMICK, CHARLES PERRY, *Multiple Management.* Harper and Bros., New York, 1938. 175 pp.

A widely publicized instance of managerial participation on the part of certain supervisors in a medium-sized company.

ROWNTREE, B. SEEBOHM, *The Human Factor in Business.* Longmans, Green and Company, New York, 1938. 244 pp.

A British philanthropist and capitalist tells the story of an experiment in management democracy in his own family business. Of particular interest are several accounts of the handling of disciplinary problems with the participation of workers.

SLICHTER, SUMNER, *Union Policies and Industrial Management.* The Brookings Institution, Washington, D. C., 1941. pp. 393-579.

History of attempts at union-management cooperation in the textile, garment and railroad industries.

INDUSTRIAL PSYCHOLOGY

Any layman should approach the field of psychology with caution and trepidation, because the word embodies a variety of approaches, some of which are critical of the others. It is an area in which fakirs and prestidigitators flourish, much to the concern of those who are professionally

trained. Even among those who are trained there are several different schools of thought. In a university department of psychology, for example, one usually finds at least two varieties living together but not entirely without friction—the experimentalists, who are professionally conscientious to a very high degree and, in general, insist upon the application of the scientific method and quantitative validation; and the clinical psychologists, who, while not eschewing statistical proof, are nevertheless more willing to rely upon clinical insight, which is another way of saying experience combined with manipulative skill. The works listed below are for the most part from the pens of experimentalists.

HOUSER, J. DAVID, *What People Want from Business.* McGraw-Hill Book Company Inc., New York, 1938. 250 pp.

Discusses the use of the attitude study in measuring work satisfaction.

MAIER, NORMAN R. F., *Psychology in Industry.* Houghton Mifflin Company, Boston, 1946. 463 pp.

A contribution worthy of attention.

NATIONAL RESEARCH COUNCIL (Committee on Work in Industry), *Fatigue of Workers: Its Relation to Industrial Production.* Reinhold Publishing Corporation, New York, 1941. 165 pp.

A symposium representing several points of view, including those of management, labor and science.

RUCH, FLOYD L., *Psychology and Life.* Scott, Foresman and Company, 1948 (Revised Edition). 782 pp.

A very popular and widely used basic college text on general psychology.

SMITH, ELLIOTT DUNLAP, *Psychology for Executives: A Study of Human Nature in Industry.* Harper and Bros., New York, 1935. 311 pp.

Discusses psychology of fear, discipline and habit.

SMITH, MAY, *Handbook of Industrial Psychology.* Philosophical Library, New York, 1944. pp. 216-220.

A summary reflecting the experience of the British who, thus far, have done much more experimental research and conducted many more field investigations in industrial psychology than have we.

TIFFIN, JOSEPH, *Industrial Psychology.* Prentice-Hall, Inc., New York, 1942. 386 pp.

This recent general textbook is a practical and readable survey of scientific findings and methodology. The chapters on testing provide an up-to-date picture of developments in that area.

VITELES, MORRIS, S., *Industrial Psychology.* W. W. Norton and Company, Inc., New York, 1932. 652 pp.

The standard work on industrial psychology, written by one who combines high academic and professional standing with industrial experience in the Philadelphia public utilities.

WEBB, E. T., and MORGAN, J. J. B., *Strategy in Handling People.* Garden City Publishing Co., New York, 1930. 260 pp.

Two academicians present their views in popular style.

CLINICAL APPROACHES

ALEXANDER, FRANZ, *Our Age of Unreason.* Lippincott and Company, Philadelphia, 1942. 317 pp.

An eminent psychiatrist discusses modern society in the light of the psychopathology of the people composing it.

ALEXANDER, FRANZ and FRENCH, THOMAS MORTON, *Psychoanalytic Therapy.* The Ronald Press, New York, 1946. 353 pp.

Discusses methods of applying briefer forms of therapy.

ANDERSON, V. V., *Psychiatry in Industry.* Harper and Bros., New York, 1929. pp. 49-84.

An account of an interesting era in personnel management at Macy's headquarters store.

GARRETT, ANNETTE, *Counseling Methods for Personnel Workers.* Family Welfare Association of America, New York, 1945. 187 pp.

A social work viewpoint toward management counseling.

GARRETT, ANNETTE, *Interviewing: Its Principles and Methods.* Family Welfare Association of America, New York, 1942. 123 pp.

Discusses important social work concepts which may be used to improve interviewing techniques.

LASSWELL, HAROLD D., *Psychopathology and Politics.* University of Chicago Press, Chicago, 1930. 285 pp.

The foray of a political scientist into the field of Freudian psychology. It is of interest here because of its insights into the history and method of psychoanalysis, plus its emphasis on the fact that mental activity is by no means confined to the conscious and logical level.

MCMURRY, ROBERT N., *Handling Personality Adjustment in Industry.* Harper and Bros., New York, 1944. pp. 190-203.

Explores a field which is receiving increasing attention. Note particularly his advocacy of sending personnel interviewers into the home to secure data on domestic situations and problems.

ROETHLISBERGER, F. J., *Management and Morale.* Harvard University Press, Cambridge, 1941. 194 pp.

Shows how the non-directive counseling principles, developed in the Western Electric experiment, can be utilized by the line supervisor himself. Roethlisberger and Dickson's *Management and the Worker* describes the system of non-directive counseling developed in the Hawthorne Experiment. (See "General.")

ROGERS, CARL R., *Counseling and Psychotherapy: Newer Concepts in Practice.* Houghton Mifflin Company, Boston, 1942. 450 pp.

The definitive work of the man who is probably the foremost advocate of non-directive counseling. Rogers' work is based upon actual experimentation, and this book includes verbatim case records.

STEAD, WILLIAM H. and SHARTLE, CARROLL L., *Occupational Counseling Techniques.* American Book Co., New York, 1940. 273 pp.

Sets forth the views and experiences of the two leaders in the original occupational research inaugurated by the United States Employment Service.

INCENTIVES AND MOTIVATION

ALLPORT, GORDON W., *Personality: A Psychological Interpretation.* Henry Holt and Co., New York, 1937. 588 pp.

Discusses the correlation between ability and interest.

HALL, PATRICIA and LOCKE, H. W., *Incentives and Contentment.* Sir Isaac Pitman and Sons, Ltd., London, 1938. 190 pp.

The summary of a series of studies by British industrial psychologists.

LINCOLN, JAMES, *Lincoln's Incentive System.* McGraw-Hill Book Company, Inc., New York, 1946. 192 pp.

The author is president of the Lincoln Electric Company, which has received widespread publicity for its system of incentive pay, bonuses, and profit sharing.

MAYO, ELTON and LOMBARD, GEORGE G. F., *Teamwork and Labor Turnover in the Aircraft Industry of Southern California.* Harvard Graduate School of Business, Boston, 1944. 30 pp.

The report of a field investigation covering several months. Its principal finding is that good supervision materially reduces turnover and absenteeism in times of full employment.

POLANYI, KARL, *The Great Transformation.* Farrar and Rinehart, New York, 1944. 305 pp.

Attacks the classical economists' concept that man has a natural instinct to "truck and bargain." Draws upon historical and anthropological sources to show that mankind is not normally motivated by considerations of the market.

RIEGEL, JOHN W., *Management, Labor and Technological Change.* University of Michigan Press, Ann Arbor, 1942. 187 pp.

Results of a survey covering many types of industries in the Detroit area. Presents some practical suggestions for overcoming resistance to change.

WHYTE, WILLIAM FOOTE (Ed.), *Industry and Society.* McGraw-Hill Book Company, Inc., New York, 1946. 211 pp.

A symposium sponsored by the Committee on Human Relations in Industry of the University of Chicago. This writer was particularly attracted by the papers of Allison Davis and Whyte himself. The former summarizes an anthropological study of the motivation of underprivileged workers in Chicago, showing the relation of culture to motivation. The latter is a summary of Whyte's important study of the restaurant industry.

LEADERSHIP

AMERICAN MANAGEMENT ASSOCIATION, *The Foreman's Basic Reading Kit.* American Management Association, New York, 1944. 213 pp.

This widely read guide to improve work relations for supervisors contains the "cream" of hundred of fine studies published by A.M.A.

BOGARDUS, EMORY S., *Leaders and Leadership.* D. Appleton-Century, New York, 1934. pp. 157-169.

A sociological approach by a well-known sociologist.

RICE, JAMES O. and DOOHER, M. J. (Ed.), *The Management Leader's Manual.* American Management Association, New York, 1947. 190 pp.

A sequel to the *Foreman's Basic Reading Kit* (see above), for supervisors, foremen, and operating executives.

TEAD, ORDWAY, *The Art of Leadership.* Whittlesey House, McGraw-Hill Book Company, Inc., New York, 1935. 308 pp.

Perhaps the best popular book on the subject.

WHITEHEAD, T. N., *Leadership in a Free Society: A Study in Human Relations Based on an Analysis of Present-Day Industrial Civilization.* Harvard University Press, Cambridge, 1937. 266 pp.

Written by one who participated in the Hawthorne Western Electric experiment.

TRAINING

ALLEN, CHARLES R., *The Foreman and His Job.* J. B. Lippincott, Philadelphia, 1922. 526 pp.

Charles R. Allen is regarded by many as the mentor of the type of foremanship training advocated by the vocational education group, and he has achieved considerable attention from his training efforts during World War I. This book emphasizes conference leadership based on job analysis.

BECKMAN, R. O., *How to Train Supervisors.* Harper and Bros., New York, 1940. 305 pp.

Chiefly of interest for its outlining of conference and discussion techniques.

CHAPPELL, GERALD G., *Training of Supervisors.* California Institute of Technology, Pasadena, 1934. 69 pp.

A practical, down-to-earth approach by a training specialist who has had many years of experience with the Union Oil Company.

CUSHMAN, FRANK, *Training Procedure.* John Wiley and Sons, Inc., New York, 1940. 230 pp.

The author, for many years identified with the federal vocational education setup, writes with authority on an important subject.

Collective Bargaining and Industrial Relations

Clapp, Gordon, Chairman, *Employee Relations in the Public Service.* Civil Service Assembly of the United States and Canada, Chicago, 1942. 246 pp.

This is an official report of a research committee set up by the Civil Service Assembly of the United States and Canada.

Cooke, Morris L. and Murray, Philip, *Organized Labor and Production.* Harper and Bros., New York, 1940. 277 pp.

A consulting engineer and advocate of scientific management collaborates with the present head of the CIO to discuss problems of labor-management cooperation.

Gardiner, Glenn, *When Foreman and Steward Bargain.* McGraw-Hill Book Company, Inc., New York, 1945. 194 pp.

Shop stewards have assumed an increasingly important role in personnel management. This book by a well-known industrial relations director examines the steward's duties and his relation to supervision.

Golden, C. S. and Ruttenberg, H. J., *The Dynamics of Industrial Democracy.* Harper and Bros., New York, 1942. 358 pp.

Two CIO officials discuss industrial problems, productive efficiency and full employment.

Selekman, Benjamin M., *Labor Relations and Human Relations.* McGraw-Hill Book Company, Inc., New York, 1947, 255 pp.

Explores collective bargaining as a social process and suggests beginnings in approach and action for promoting cooperation and reducing conflict. The chapter entitled "Handling Shop Grievances" poses clearly the difference between two methods of arriving at agreement and truth. One is the legalistic, wherein opposing parties offer evidence and argument in an atmosphere of contentiousness before an allegedly impartial judge; the other is the clinical approach, wherein specialists look for the facts as revealed by science and research in an atmosphere of cooperation and consultation, rather than through contest. The conflict between these two methodologies is apparent in all fields of human relations. The reformers in the field of social welfare want to turn the courts dealing with social violators into clinics rather than traditional tribunals and they have partially succeeded in the case of juvenile courts. At present there is some controversy between the attorneys practicing labor relations, and those who are not legally trained, such as economists and psychologists. The author makes a strong plea for settling disputes at the shop level.

Slichter, Sumner H., *The Challenge of Industrial Relations.* Cornell University Press, Ithaca, 1946. pp. 99-123.

Observations on the internal government of labor unions.

Slichter, Sumner H., *Union Policies and Industrial Management.* The Brookings Institution, Washington, D. C., 1941. 597 pp.

Note reference to the emergence of industrial jurisprudence.

Warner, W. Lloyd and Low, J. O., *The Social System of the Modern Factory.* Yale University Press, New Haven, 1947. 245 pp.

The fourth volume of the Yankee City series. Reports on a survey of an old New England factory community by a group of applied anthropologists. Earlier volumes describe the community at large, while this one deals with the first strike and unionization in the shoe factory.

White, Leonard D., *Whitley Councils in the British Civil Service.* University of Chicago Press, Chicago, 1933. 357 pp.

Report of a study by the dean of American scholars in public administration, based on first-hand investigation and observation.

Williams, Whiting, *What's on the Worker's Mind.* Charles Scribner and Sons, New York, 1920. 329 pp.

The author of this book went into the steel mills, mines, and forests—the basic industries—as a rank-and-file worker. By living as one of a group of laborers he was able to study and write authoritatively about their culture and sentiments. A most realistic account of an era of industrial relations which has for the most part given way to a more humane and enlightened one.

Ziskind, David, *One Thousand Strikes of Government Employees.* Columbia University Press, New York, 1940. 279 pp.

The history of strikes in the public service, demonstrating that they will occur despite legislation which attempts to prohibit them.

Job Analysis and Work Simplification

Baruch, Ismar (Ed.), *Position Classification in the Public Service.* Civil Service Assembly, Chicago, 1941. 404 pp.

Mr. Baruch has for many years been Chief of the Classification Division in the U. S. Civil Service Commission. The basic principles of job evaluation stated here are just as applicable to industry as to government.

Benge, Eugene J., *Cutting Clerical Costs.* McGraw-Hill Book Company, Inc., New York, 1931. 327 pp.

A practical manual for work simplification in the office. Gives down-to-earth examples for solving problems which constantly arise in white-collar units.

Loveridge, E. W., *Job-Load Analysis and Planning of Executive Work in National Forest Administration.* Government Printing Office, Washington, D. C., 1932. 236 pp.

A basic manual for measuring the work of executives and supervisors who work in the field. The plan has been introduced gradually and has achieved increasing acceptance over the last 20 years. This book is now out of print but a revised edition is in process and due soon.

MANAGING YOUR TALK

By CLOYD S. STEINMETZ
Director of Training
Owens-Corning Fiberglas Corp.

For almost every business executive—and particularly those in personnel and sales work—occasions often arise, on the job or among professional colleagues, when ability to address a group effectively would be an invaluable career asset. The experts agree, however, that this is largely an acquired rather than a natural or inherent ability, and that knowledge of a few basic principles of effective presentation, plus practice, will enable anyone with a message to hold his own on the speaker's platform. Here, then, are the principles—the "do's and don'ts"—that have helped many managers toward effective expression when conducting committee or training meetings or leading conferences for the purpose of giving or getting information and ideas.

PRIMARILY a manager is a salesman of ideas. To sell his ideas he finds it profitable and necessary to talk with persons individually and in groups. He seldom hestitates to hold the individual interview, but when time limitations make it advisable to talk to five, 15 or 50 individuals at the same time, he frequently tightens up.

Suddenly the group or "gang" of close acquaintances seem to become strangers. Result—a tenseness, an unnatural formality comes over him and effectiveness goes out the window. Instead of remembering that strangers are just friends still unmade, we find the manager throwing away his warm effectiveness of expression for a chilling coldness that freezes even himself.

Some time ago, a group of managers were suddenly given the task of

conducting a series of meetings with groups of their employees and customers. It was while helping these men develop their effectiveness of expression, that the following "Do's and Don'ts" were collected. They helped these men do their job well. They have helped others to do so since then. Taken seriously, they can help any of us, for they simply serve as a mirror against which we can measure our present efforts toward effective expression when conducting committee meetings or training meetings, or when leading conferences for the purpose of giving or getting information and ideas.

Dealing with people through group contact is one of the finest ways in which the manager can multiply himself through others. Mastery of effective group-contact technique often spells the difference between a successful and a mediocre manager. It is a technique well worth cultivating —and it's really easy to master.

I. GETTING ACCEPTANCE FOR YOURSELF AND YOUR IDEAS

Getting Acceptance for Your Ideas is the biggest job you have as a manager. Of course, your talk should be prepared in advance as to subject matter and sequence. But no outline, notes, or set of instructions can make the subject alive and acceptable in and of itself. A poor presentation can ruin the best outline or speech ever prepared, just as a poor actor can completely spoil a Pulitzer prize-winning play. But many poor plays and outlines have been made acceptable—even successful—because of the personality of the actor or speaker. If the group does not like the speaker, the subject suffers regardless of its merits. If they do like the speaker, the subject is often accepted despite its faults.

So much depends upon *you* that it would surely be unwise to spend all your time and attention on what you are selling. What your audience thinks of you is largely determined by the way you conduct yourself in its presence. The advisability of "just being yourself" is over-valued by too many managers. Determining first what you *should be* and seeing to it that you really *are* what you want yourself to be is the bigger thing.

Becoming what you want to be is really no more difficult than deciding what you want to be. Simple, natural, everyday approaches are all it takes. The difference lies in making sure rather than taking for granted what you will do before the group. Measure yourself by asking: "How often do I use this or that strong point?" and not "Do I use it?" or "Have I used it?" Of course, you use them all sometimes. To strengthen your cause, use them *more* times. Practice will protect you from failure. Use more of your abilities more often.

Be Informal. Formality limits and discourages group and listener activity; it inhibits the tendency to participate. Informality does not mean lack of organization or forcefulness. Rather it means getting as close, mentally, to your listeners as possible.

Make the opening statement a spontaneous, friendly, and provocative one. Avoid the stilted "Gentlemen." Instead, use "men," "fellows," "gang,"

or, better yet, just go ahead and state the purpose of the meeting. Emphasize why it is of interest to them. Point out how it can be of value to them or how they can give valuable help.

Smile more. So much has been said about the value of a smile that we have come to believe sincerely that it would do more to make mankind happier than all the gold, might or talk the world possesses. ("A smile can burst the clouds in two, and let the face of God shine through," the poet said.) A smile is the one commodity everyone possesses regardless of his health, wealth, or position. But is it used nearly as much as it could and should be—by you? By any of us? Smile more, it speaks all languages. A smile, rightly used, has a place in every type of meeting or conference.

Ask questions. They keep your group active and enable others to make their contribution, your idea thus becomes "theirs." And as co-authors or critics who have been given a chance to express themselves about your idea, they find it acceptable. Furthermore, this device will enable you to do less talking and more listening. Questions also take the guesswork out of progress. Through their answers you know where each person stands and can plan your strategy accordingly. You know how group members feel and can gauge their understanding of your ideas by their ability to discuss them or give them back to you. Even asking a question without permitting an answer stirs your listeners to attention.

Suggest instead of command. Our listeners, like ourselves, resist another person's attempt to dominate them. Such resistance will sabotage your selling job.

KEEP IN MIND THE INTERESTS OF YOUR LISTENERS. Present all the ideas you want to convey in terms of your listeners' wants. Keep them aware of how the action you are prescribing may satisfy their wants. You must be interested in *them* and show your interest before you can be interesting. Ask yourself, "What are the interests of Joe on this matter?" When possible, consider the interests of *each* individual. In any case, be sure you have identified the group's common interest, and remember that the interests of groups vary. Quality control men have a different view of matters than do production operators, etc.

WATCH THE GROUP. The eye is the speaker's most eloquent means of communication. It works wonders. It gets and holds attention. Make each listener feel as though you were talking to him personally by looking at him in a personal way. The expressions on the faces of your listeners will tell whether your presentation leaves confusion, skepticism or acceptance in your listeners' minds. Make eye contact with *each* person or at least persons in many segments of the group. It will help convince them of your sincerity.

CALL THEM BY NAME FREQUENTLY. It is a compliment to anyone to have his name used in the presence of others. Occasional use of our name in private or public conversation pleases us, revives our attention, and helps foster agreement. Use of names throughout a discussion puts

"persons" and warmth into otherwise cold discourse. If the group is unfamiliar, you can still get the names of some persons to whom you can refer. Your host will gladly help you if you ask him. This is purely a matter of initiative and effort, and it pays mighty big dividends.

ACKNOWLEDGE ALL COMMENTS WARMLY. Give credit for the effort expended, but be sincere—don't overdo it. An incorrect answer perhaps deserves more consideration than a correct one, for that means that a weakness has been discovered. Remember, it requires effort to give wrong answers as well as right ones. Appreciate that effort. Use the "Yes, but—" method when comment gets off-track. Seldom, if ever, is it advisable to make a purely negative response, for this is almost certain to create resentment and perhaps anger.

AVOID EMBARRASSING STATEMENTS OR QUESTIONS. They focus attention on the wrong points. The safest questions are Kipling's W-questions:

> I kept six honest serving men
> They taught me all I knew
> Their names are What and Why and When
> And How and Where and Who.

USE LOCAL ILLUSTRATIONS. They provide an easy way of sincerely complimenting your audience. They demonstrate your recognition of local situations and your knowledge of conditions that are a part of your listeners' lives.

EXPRESS FACTS AS FACTS, NOT AS PERSONAL OPINIONS. "I want," "I think," "I know," and "I like" limit the acceptance of the rest of the statement. You are presenting facts, not identifying your personal wants, likes, and interests.

DISTRIBUTE QUESTIONS, DISCUSSION AND PRAISE EQUITABLY. Neglect and over-attention are the extremes to be avoided. Every man wants and deserves some attention. Circumstances will dictate the proper amount to give. The slower person needs more attention than the one who always has the ready answer.

DON'T OVER-EMPHASIZE MINOR POINTS OR COVER TOO MANY DETAILS. Time is always the limiting factor. Over-emphasis is distasteful and time-consuming. Discussion of too many details suggests that no single detail is particularly important. Some are, of course, extremely significant, but certainly not all.

BE SERIOUS, BUT NOT OVER-SERIOUS. Do not stress every word. It is a sign of lazy, hazy thinking. If you can be serious about your subject and yet let either your face or voice or both carry a smile, you need not worry about being too serious, monotonous or uninteresting. A change in the pitch of the voice and the speed of your words will assist you.

BEWARE OF "WELL,—" AND "AND-A'S—" as sentence starters. They are unnecessary and terribly boring. Er's and ah's in your conversation should also be spotted and eliminated.

USE ALL STORIES AND ILLUSTRATIONS AS YOUR OWN unless mentioning their source adds authority or prestige. The illustration's biggest value usually lies in the way it conveys the ideas, not in who originally told it. If the incident is humorous and slightly embarrassing, tell it on yourself. You'll gain acceptance and sympathy.

WATCH YOUR TIME FACTOR. Allocate your time to the material equitably. Remember, the problem of time distribution is your responsibility. To share it with your listeners doesn't help you in the least and may only distract your audience.

USE ALL FOUR TRAINING METHODS—QUESTION, OBJECT, DEMONSTRATION AND DRILL. Check your ability to use these methods properly. Have any necessary visual materials present. Dramatize whenever possible. Show how not to do it; how it was done; how it actually is done. Demonstrate, don't just talk.

SUBMERGE YOURSELF IN YOUR SUBJECT. Be the propeller that is working unseen beneath the surface pushing the idea forward. You want to give your listeners your ideas, not yourself. So put yourself in the idea. The conscious mind can hold only one dominant thought at a time. If you are thinking of *you*, you cannot be thinking of the subject. And neither can your audience.

Getting acceptance for yourself and your subject means fusing yourself with your subject so completely that the listener gets but one impression, namely, the idea being presented.

II. ENTHUSIASM AND ACTIVITY

Presentation of cold facts—no matter how true, how well substantiated or how logically presented—seldom, if ever, gets the reception and acceptance that a warmly enthusiastic delivery receives. Knowledge and belief in the subject, and a realization of its value to your listeners, should stimulate your desire to give them the information they need. There are certain thoughts on presentation which, when used, make for favorable results.

POSITION. Before you start your remarks, pause for a moment. A good deep breath will act both as a timer and an exhilarator. A purposeful silent period always gets attention. It permits the listeners to settle down and you to prepare yourself.

LOOK AT YOUR AUDIENCE. And continue to do so as you start and progress with your story. Speak your first words slowly and distinctly, but not too loudly. Then gradually build up the volume of your voice until you see that the listener farthest from you hears you easily. Whether sitting or standing, combine good posture with an attitude of ease and informality.

MAKE ALL STATEMENTS FORCEFUL. Direct all statements to your listeners, not to your notes, the floor, ceiling, or out the window. When reviewing, remember that here especially you want to talk to the listeners, watching their reactions so as to put stress on proper points.

VARY THE INFLECTION AND VOLUME OF YOUR VOICE. And vary the speed of your talk. Keep it alive. Let the voice register feeling and enthusiasm, as in normal conversation. Its volume and pitch should be governed by the importance of the material. Stressing insignificant details is as wasteful a process as presenting main ideas and vital facts without emphasis.

IF STANDING, MOVE ABOUT OCCASIONALLY. But always face your audience. Move forward, backward, to the right or left. Use the blackboard

freely; it provides action and dispels embarrassment. If appropriate, keep visual aids on hand and pick up these objects as they fit into your exposition —but leave them alone at all other times. Don't play with them.

USE GESTURES. Move your hands and body in keeping with your thoughts; let the expression on your face help convey your meaning. Gestures should be relaxed, not overdrawn and melodramatic. They are the responses of an individual to his understanding and feelings. Therefore, live your subject, visualize yourself in the situation you are discussing.

AVOID SILENT, INACTIVE PERIODS. Such pauses should be used only for emphasis.

DRAMATIZE WHENEVER POSSIBLE. There is no need to seek dramatic perfection, but change from explanation to acting out provides realism and humor. Show the way *not* to do it, or the "before and after."

USE ONLY STORIES OR ILLUSTRATIONS THAT ARE PERTINENT TO THE SUBJECT. See that they support the idea rather than detract from it. Humor is of value, but hilarity can be detrimental. Seek to improve the quality of the illustrations or stories you use to emphasize your points.

ASK QUESTIONS FREQUENTLY. They require activity on the part of the listener and safeguard against monotony. Inattention can be best controlled by the use of questions. Keep the sluggish man awake and alert by the constant threat that a query may be directed his way at any moment. Look at the group when asking the question. Then let the group answer it. Don't proceed immediately to give the answer yourself. Remember questions help you to control and encourage discussion.

MOVE ON TO THE NEXT IDEA RAPIDLY. Unnecessary repetition, explanation, or elaboration is almost as bad as hesitancy. Do a thorough job as you go, but see to it that there is always an uninterrupted forward movement. Deal with it as you would a good dinner. When the appetizer is finished get after the entree with the relish that good fare encourages. Don't nibble. Whet the appetite of your listeners—make it tasty.

DON'T MENTION IT TO THE GROUP IF YOU ARE OVER-RUNNING YOUR TIME. The audience can do nothing about it except become restless when that fact is made known. It is your responsibility to apportion your time properly. By keeping a watch in sight and keying the time factors to your notes or outlines, this difficulty can usually be avoided.

The ability to keep yourself active and your listeners both mentally and physically alert is a vital factor in successful speaking. The germ of enthusiasm is a contagious one. Properly exposed to it, your audience will catch it, too.

III. HANDLING OUTLINES AND NOTES

AN OUTLINE, properly constructed, is the subject translated into key ideas with the supporting evidence for each idea immediately following. A good outline gives you easy access to all important thoughts and furnishes visible guides to your talk. It enables you to avoid cluttering your mind

with a confusion of words and phrases and permits you to go ahead and express in your own words ideas with which you are very familiar. The outline usually consists of three parts:

I. INTRODUCTION, which covers the purpose and aim of the discussion, arouses interest and supplies the necessary background for an intelligent study of the facts.

II. BODY OR DISCUSSION, comprising the bulk of the outline, is an orderly presentation of facts and substantiating evidence designed to get conviction or acceptance.

III. CONCLUSION, a brief, accurate résumé which restates the purpose of the discussion, summarizes and coordinates the material presented, and thus demonstrates that the objective has been or can be attained.

INDENTATION is a device which graphically indicates the relative value of the discussion material and the order of its consideration. The physical arrangement of an outline should be such that the farther the indentation is to the right, the more subordinate the material. Evidence given equal indentation possesses equal value. Indented material therfore should be used as supporting evidence and not for major points. Thus, in the following illustration, the sum of the Roman numerals I, II, III, and IV equals the whole subject. The sum of the capital letters A, B, C, etc., appearing under a Roman numeral, equals the adequate development of the Roman numeral. Likewise, the sum of the Arabic 1, 2, 3, etc., appearing under a capital letter, equals the adequate development of the capital letter.

THE STORY OF FIBERGLAS

I. Introduction
II. History of Glass
  A. Natural Glass
  B. The First Man-Made Glass
  C. Significant Dates in the History of Glass
    1. 12,000 B. C.
      a. First glazed clay beads—Asia Minor
    2. 9,000 B. C.
      a. Glazed clay figurines—Egypt
    3. 7,000 B. C.
      a. Oldest molded glass (amulet)
    4. 1,550 B. C.
      a. Glass became a thriving industry in Egypt
    5. 300 B. C.
      a. Blow pipe

A consistently employed system of indentation makes clear at a glance the relative importance of headings and supporting material.

NOTES are very brief, written reminders or word charts used to aid the speaker. Frequently a completely written talk is incorrectly referred to as notes. Notes should consist only of a few vital headings, sub-topics, quotes, and statistics, written preferably in outline form—at any rate, in such a manner that you can distinguish them at a glance. They are designed to make the speaker more comfortable and confident about the sequence of his points. However, there are disadvantages as well as advantages to their use.

Try to get along without them. This, of course, necessitates adequate

preparation, which renders the use of notes at the time of presentation almost unnecessary. The speaker who works without notes or written papers conveys to his listeners the impression that he speaks from a wealth of knowledge and experience. They feel that he must have great mental reservoirs of information from which he is drawing his material. Thus an impression of leadership is created. Even when the speaker is a well-known authority, his influence is weakened by the presence of extensive notes, which may suggest superficiality, formality, or lack of confidence. Worst of all, they tend to interfere with what might otherwise be an effective presentation by diverting too much of the speaker's attention away from the audience, where it belongs. As was mentioned earlier, the eye is the speaker's most eloquent means of communication. It gets attention and holds it. Looking at notes, like looking at the floor, the ceiling or out the window—anywhere except into the faces of your listeners—is fatal. "I'd like to know why the superintendent is always looking at me in staff meetings," said one foreman. "That's queer," replied another foreman, "I thought he kept looking at me." This sense of individual searching and questioning is important. The eye has magnetism—it induces a current of sympathy which should not be broken unnecessarily. If it is, you will have to start all over again to create sustained interest.

The old saying that "the exception proves the rule" surely applies here, by the way. The world's outstanding exception was Franklin D. Roosevelt, whose ability to read a speech developed to an art. Few, indeed, possess his ability to read a speech in so challenging a manner—but fewer still would claim that reading improved even Mr. Roosevelt's presentation.

Short talks, such as are given in committee, production, or sales meetings, are not hard to manage without notes. Adequate preparation will insure that the material is arranged in a definite form so that you can easily recall it with the aid of a few cues. These leads are the main headings of your outline. There ought not be more than three or four of them, and they can be readily memorized or unobtrusively noted.

As you begin your talk, place the card containing your notes on the table or stand and forget it. If you should need it, which is not likely, turn to the card and examine it leisurely. If you hold it in your hand, you may keep looking at it unnecessarily and thus spoil your talk.

If you are working from an outline instead of notes, use it sparingly. Glance at the main head to see the idea, not to read the words to your listeners. You should have already familiarized yourself with the subject. Therefore, a glance at the main head will give you the idea and keep you on track. Develop that idea in your own words.

Usually an outline contains considerably more information than can be presented in the allotted time. Here two mistakes are frequently made: First, that of trying to explain and use every item in an outline—every illustration. Instead, you should *regulate the number of illustrations* you use by the speed with which your listeners seem to grasp your thoughts. If the first illustration anchors the idea forcefully—and watching your audience will tell you this—then let well enough alone. Pass on to the next idea. If, however, they

seem to be hazy about the idea, it may be necessary to use all the illustrations in the outline, and possibly some additional ones of your own.

The second mistake is that of reading the outline to the audience without developing any of the thoughts. This brings the talk to a premature conclusion with the unfortunate result that none of the ideas have been put across. Remember, an outline is like the scaffolding of a house. Functional though it may be, it is unsightly if exposed without external ornamentation. This you must add as you build your talk.

The exceptions are statistics and quotations of more than a line or two, which should be read as is to emphasize their authenticity and exactness.

Marking Outlines for blackboarding, questions, illustrations, visual materials to be used and time factors makes them much more helpful. Outlines so marked are less apt to be read and more apt to be used as aids to discussion.

Review at the Conclusion of Each Subject and following the presentation of all major points is a device used by most effective speakers. A quick review coordinates the individually presented facts into a coherent picture and may put them into a new perspective.

Keep Notes in a Convenient Place for ready reference. The speaker's table or stand should not be too low. Stooping forward to read notes throws you off balance and makes for an awkward appearance. A small stand or box placed on the table top will bring your notes into proper position. Similarly, dim or glaring light that requires you to fix your attention on the notes is disconcerting both to you and to your listeners. Resting notes upon an incline or tilted surface considerably facilitates quick reference.

The Goal of the Effective Speaker is to fix the outline in his mind so that reference to notes or outlines during presentation is cut to the barest minimum. Repeated practice will make this possible. But it should not mean that the speaker thereafter makes no further use of his notes. It still will remain his obligation to himself, his subject, and his group to review his notes before starting each meeting to refresh his mind, and after the meeting to check once again on any material which may have been by-passed. Overfamiliarity with material breeds contempt for detail which is disastrous unless check-mated by constant surveillance.

IV. USE OF THE BLACKBOARD

(Note: Reference to blackboard is used in the broad sense to include either the blackboard and chalk or the paper chart pad and colored crayon. Use of the latter is preferable in that the material need not be erased and destroyed to provide more space. Consequently, material written on charts can be referred to for review.)

Value of Blackboarding

1. It places more importance and value on the subject. The fact that the speaker takes the time and expends the energy to blackboard the idea implies that it must have considerable value.

2. It capitalizes on the eye-mindedness of the listener. Since sight is 20 times as sensitive as any other sense for learning purposes, it should be treated as an important factor in the presentation of ideas.
3. It lends action to the scene. It forces the speaker to keep active; and since the usual response of the listener is to take notes, it keeps him active, also.
4. It causes more and better notes to be taken. The power of suggestion is strong and listeners tend to copy all material written by the speaker. As the material is being copied, it is checked against the material on the blackboard, which makes for greater accuracy.
5. It permits the slower man to continue writing. Even though he is behind the rest of the group the permanency of blackboard material as compared with dictation allows the slower writer to copy all the information accurately.
6. It calls for the use of all three of the major training senses. In addition to seeing, the listener also hears the material repeated several times and "feels" it as he writes his notes.

USE THE BLACKBOARD OR CHART FREELY. At a minimum put all major points on the blackboard that they may stand as markers to recall the supporting ideas. In addition to the advantages mentioned, frequent use of the blackboard breaks the monotony of just listening and looking without expending any physical energy. It is a good safety measure to mark all notes and outlines with some convenient symbol such as a "B," to call attention to material to be blackboarded.

STAND ASIDE, NEVER IN FRONT OF THE CHART OR BLACKBOARD. Standing in such a way as to obstruct the view of any observer is disconcerting and annoying to him and discourages his attention and note-taking. It also diminishes the importance of the material presented. Standing to the side, preferably to the left, of the chart and allowing, insofar as possible, only the right or writing arm to obstruct the view is a rule worthy of constant observation. Keep your body as close to the blackboard and as far to its left side as possible. Learn to write to your right side rather than in front of you. As soon as you are finished writing, step back and away from the chart until such time as all note-taking has been completed or until you are ready to resume blackboarding or discussion.

The rule just given applies also where ready-made charts are being displayed. The use of a pointer will help, for it keeps the speaker away from the chart and also assists in focusing attention. If we remember that the value of the chart depends upon the extent to which the observers can see it, we will see that the chart is always within the sight of all.

STATE COMPLETELY THE FACT TO BE PUT ON THE BLACKBOARD, THEN REPEAT IT BEFORE WRITING. This is necessary so that the audience may understand the thought before jotting down notes on it. Presentation of the idea first makes the dictation which is to follow intelligible and meaningful. Second, you should repeat the statement slowly and clearly before blackboarding. This makes capital of the value of repetition, which deepens the original impression.

When Writing or Dictating the Thought, Separate It Into Logical Component Parts. The combined activities of writing, looking, and listening cause the attention of the listener to be somewhat limited at any one time. Part by part presentation keeps the group on an even basis. More important still, the learning process is made easier and more permanent by the simple device of breaking any thought or fact into its smaller component parts.

Dictate as You Write, Thereby Avoiding Silent Periods. Silent periods are non-productive and may even have detrimental effects. The manager becomes self-conscious and any outside disturbances such as the sound of street cars, automobile backfires, sneezing, whispering, etc., take command of attention. Conscious use of a silent period for emphasis is an entirely different matter—and a potent speaking device. Furthermore, dictating as you write permits the learners to take notes even though they are unable to see what you are writing on the blackboard. Consequently, time is saved, attention is maintained and more notes are taken.

Dictate Each Word Before You Write it on the Blackboard. Do not wait until you have finished writing the word. As already mentioned, this keeps the members of the group on a par with the speaker and with one another instead of their always being a step behind.

Write the Full Thought on the Blackboard Before Discussing It. Give the listeners the complete picture. Then analyze its parts and discuss it as necessary. In this way the listener will see the end or goal toward which you are working.

Suggest Rather than Request the Taking of Notes. A dictatorial attitude is always undesirable, and in the case of note-taking it is unnecessary if the blackboard is used freely. There is always a close relationship between the completeness of notes taken and the amount of blackboard work done. The mere use of the blackboard suggests note-taking and usually only the reminder that "this might be worth putting in our notebooks" is necessary to get action.

When Space Is Too Limited to Accommodate the Next Complete Major Heading and Subheadings, Use A New Chart Sheet. This permits the speaker to present his ideas as complete units. It is advisable to list all procedures on separate sheets to emphasize their importance and to keep them apart from any confusing or distracting information. Frugal use of charts is, in the long run, false economy.

Leave Procedure Charts Free from Non-Essentials. This will make the procedural steps stand out. And the greater the simplicity, the clearer the impression. This does not mean, however, that supplementary diagrams and words should not be written out. They should be used frequently. But put them on separate chart sheets or sheets not containing written procedures.

Review at the Conclusion of Every Subject. Do this with the aid of the blackboard or charts if possible so that, again, the sense of sight as well as that of hearing is employed. In case charts have not been used, it's much better to review from memory than to use your notes. Concentrate your eyes on your audience when reviewing and, where possible, try to

rephrase some of your ideas in order to sustain attention. This is where you must tie together your points in order to complete your selling job.

There are instances when it is more advisable to use dictation only, rather than combining it with blackboard work. The time limits may make it necessary to get the material into the listeners' notebooks as rapidly as possible, or blackboard facilities may not be available. When such occasions arise, *adjust the speed of dictation to the slowest writer.* This person is soon identified if you watch your listeners closely.

To avoid irritating the more rapid writers, ask one of them to read any statement that the slower writers need repeated. This helps to keep the group active.

A PSYCHIATRIST LOOKS AT HUMAN RELATIONS IN INDUSTRY

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As it becomes generally recognized that the proper study of human relations must be based upon an increasingly scientific or clinical approach, industry is drawing more and more heavily upon the knowledge and resources of psychiatry for new insights in resolving its own internal "emotional" problems. Here an industrial psychiatrist describes how certain unrealistic or unsound attitudes, which we usually associate with the disturbed individual, may develop on a mass basis and so disturb the equilibrium or "emotional health" of the group. This article is adapted from a paper presented at the Thirty-Eighth Annual Meeting of the National Committee for Mental Hygiene.

INDUSTRY constitutes one of the most realistic situations existing in our modern world. As such it is a testing ground on which the strengths and weaknesses developed by the early training of individuals become clearly apparent. The reactions of men and women in this real world disclose faults and virtues of school and home as did army life during the war. They bring out, also, the factors that cause functional mental disorders in so-called normal people. Psychiatric observations of these factors should, in time, supply us with data by means of which we can diagnose important causes of psychiatric conditions and go on to develop effective measures for preventing them.

In order to produce goods at a cost that makes them saleable in a competitive market, industry has to take the young men and women turned out by our schools and homes and mold them into teams that work together in some degree of peace.

The results of such efforts have been far from perfect. When you read about all the strikes we have suffered in recent years you are apt to feel that such efforts have completely failed. Actually, they have not. Few industries have been destroyed, as countries are destroyed in war, as a result of failures in human relations. Despite the flare-up of strikes, industrial managers have been able to reach agreements with their men and go back to work together as nations no longer seem able to do.

Other industries have had few or no strikes. They have been more successful in developing the good human relationships that are essential to good industrial citizenship.

From the failures and the successes—both relative, neither perfect—we have much to learn about the factors that contribute to or that detract from good human relationships. Study of the failures should enable us to avoid practices that are dangerous; study of successes should highlight the essentials for good social and industrial citizenship.

Industry learned a long time ago the need for trying out new methods and processes in a small way before putting them into production. Even the most valuable of new products and new processes are tried out, for months and years, in laboratory first and small pilot plants second before their value can be determined. Costly experience has proved that some of the most wonderful-sounding ideas—in fact, many such ideas—fail to work in actual practice.

A great many people still fail to realize the need for actual testing in the field of human relations. I am convinced, however, that we must accept this scientific viewpoint toward people as well as things if we are to achieve good human relations.

A COMMON DEFECT

My own study of individuals in and out of industry discloses one unhealthy trait of normal, civilized men and women that appears important above all others in keeping us from acting as desirable members of the industrial or social community. Fortunately, it is not a natural trait. Wild animals do not exhibit it. The primitive people I once came to know had little of it and had found how to bring up their children with little or none of it. It is a product of civilization.

I refer to the marked tendency of normal, civilized men and women to indulge in flights from reality, to accept these as real, and to base important actions on them.

Now, flight from reality has long been recognized as characteristic of functional mental disease. When we discover that a man reacts to the fixed false beliefs we call delusions, we begin to suspect that he suffers from a psychosis. If, on further investigation, we find that he believes himself to be omniscient, omnipotent, and infallible in his judgments and that he believes he is the Messiah with a call to save the world, we are satisfied that the poor fellow has developed what the layman calls insanity.

We come to the same conclusion with another individual who, without ever saying that he believes such things, begins to act as if he did. This man becomes physically and mentally overactive, has a flight of ideas, and

acts as if he had acquired all knowledge and all power. He shows an awareness of reality, but misinterprets facts. We say that he has "flown into reality," but actually he translates reality into unreality.

In either case we recognize the characteristic flights from reality of the mentally deranged. We have learned that the reasoning of such people is impaired and their judgments untrustworthy. We treat them accordingly.

GROUP "FLIGHTS FROM REALITY"

What we do not accept and do not like to think about is the unpleasant fact that we normal people are also subject to flights from reality. We, too, have our delusions of grandeur. We, too, at times, develop Messianic drives to save the world and, as part of these, assume that we have developed knowledge which, if not superhuman, is certainly superior to that of other peoples. The chief difference between us and the psychotic, then, appears to be that we agree to react to the same delusions in groups, while the psychotic insists on keeping his delusions individualistic and will not cooperate with others.

For example, a mass flight from reality was developed and proposed toward the end of World War II when it was demanded that industry supply jobs for 55,000,000 workers the moment the war was over. This was based on the assumption that industry supplies all the jobs in the United States.

The facts were these: The highest percentage of our population that ever worked in industry during peacetime was 6.7 per cent. Even in the midst of the war, when industrial production was at its peak, only 23 per cent of those employed were in industry. If industry, at the end of the war, had been able to hire 55,000,000 people, there would have been nobody left to run our farms, stores, railroads, utilities, and other services. The resultant chaos would have made it impossible for industry to operate, and there would have been jobs for nobody.

Such flights spring from the minds of individuals. They are then adopted, with little or no real thought, by others. And this latter phenomenon—the absence of searching, independent fact-finding and thinking—constitutes one of the greatest dangers to industrial peace.

Let us consider the mass flight from reality on an even broader basis —that of international relations. Hitler, *per se,* was no more dangerous to world peace than is the psychotic. What made Hitler dangerous was the readiness of masses of people to follow him blindly—even to their deaths.

But even so, Hitlers and their followers in other countries would not need to be too dangerous to us except for the existence of the same characteristic in us. The recent war could probably have been prevented, with comparative ease, if we had faced reality during the early nineteen-thirties.

But this we refused to do. We would not even permit ourselves to admit that another war was possible. We insisted, instead, that another was unthinkable — that a man with a Charlie Chaplin mustache was

ridiculous and could not be dangerous; and then, with complete inconsistency, we tried to appease Hitler as we try to appease our own spoiled children. By doing so, we evaded the issue at a time when a small use of force might well have stopped the catastrophe.

What makes people react this way? We desperately need the answer to this question before we can hope to progress further. Diagnosis must precede both treatment and prevention or we are very apt to repeat old mistakes and kill a world suffering from a severe attack of appendicitis by administering another dose of castor oil.

What makes *us* react this way? Until we learn how to correct this tendency in ourselves and our own children, we are in no position to cure the ills of the world. To see clearly, we must first cast the mote out of our own eye.

This tendency to fly from reality, as study of normal people at work discloses, is nothing more or less than another symptom of functional mental disease. It is a product of exactly the same forces that produce psychoneuroses, functional psychoses, psychosomatic ills, and behavior problems.

If this be true, it throws the problem of building good citizens, whether these be citizens of a factory, township, city, state, or world, squarely upon ourselves. It also throws upon us the responsibility to stop and examine ourselves and our own ideas, to make sure that we are not evading some of our own realities.

SOME COMMON MISCONCEPTIONS

There are certain areas in which, I suspect, this may be true and I am going to mention two or three:

1. *We put too much emphasis on clever ideas, per se.* Young men, entering industry, often suffer intensely because they have been taught, in school, college, and technical schools, that bright ideas are at a premium in the outside world.

Young technical men, for example, often become very much disturbed when they enter an industrial research laboratory and find that unproved ideas, by themselves, have little or no value. Some become so emotionally disturbed that they fail completely.

Such tragedies could be prevented—as they are prevented in some homes and some schools—by maintaining a more realistic atmosphere in which bright ideas as such are not so highly rewarded.

The reality in the research laboratory is this: Bright ideas are common. The big problem is that of trying to determine, in advance, which of many ideas is most apt to repay the time and money required to test them out.

Because this is true, there naturally develops a custom of testing out new men. And the criterion for such testing is by no means the brightness of their ideas, but the degree of realism with which they attack the problems assigned them. Only after they have demonstrated productive ability will anyone pay much attention to their ideas. Men of ability, who accept this reality, usually get ahead. Some go to the top.

If, in the world at large, we learned to judge ideas and men in terms of the results they produce in their daily work instead of on their ability to sell ideas, I believe we could do much to produce a better world in which to live.

2. *When men have produced results in one field of endeavor, we tend to assume that they are experts in all others,* whether or not they know anything about such other fields. This can be highly dangerous. Hitler may have been an excellent paper-hanger. He undoubtedly was an excellent salesman of his own ideas. But ability as a salesman should not be accepted as proof, in itself, that such a salesman has demonstrated the quite different qualities required in a good ruler. Yet we react as if they had, over and over.

In industry we are beginning to learn to guard against this dangerous habit of thought. An excellent craftsman may, and often does, make a very poor foreman. So, when it comes time to choose a new foreman, every effort is made to choose the man who has proved, in his past human relations, some ability to get along with other men and to get them to join in a team to produce something worth while.

I am touching here on a formula for success and its rewards—another flight from reality—which we seldom verbalize, but which has tremendous influence in leading us into difficulties.

It seems to be a common delusion that success in any line confers some sort of omniscience in all other fields of knowledge and endeavor. The prospective mother commonly expects that when she achieves motherhood, she will become a different kind of being and "know best" about everything pertaining to children. The successful man in business or in a profession often acts as if he believed that his success in one field had conferred omniscience about all the material problems in the world. This type of flight from reality will continue to be prevalent until, in our own schools and homes, mothers and fathers cease to react to it. For, as long as we continue to react to it, our children will follow our bad examples and the disease will increase.

3. *We tend to confuse material security with emotional security.* Everybody, these days, is thinking about security. And we should be. But the very importance of security should make us take special care to be realistic in our thinking about the subject. To depend on a life raft and then to find, when the ship sinks, that the raft is unseaworthy is disastrous.

Feelings of insecurity produce many problems in industry. Some industries have gone far in supplying material security for their employees. In government, civil-service practices attempt the same thing.

But this approach to the problem fails to relieve the *individual's feelings* of insecurity. It fails so often that we may begin to suspect there is no relationship between material security and the inner feeling of security. Psychiatrists with wealthy patients know this.

I am convinced that it is true. I saw and lived, years ago, among aboriginal Indians and others living in a state that we would consider semi-starvation, in constant danger from the perils of the jungle and tropical disease, who showed every evidence of enjoying a state of feeling

secure almost beyond the conception of civilized people today. A recent article about the Marshall Islanders emphasizes the same point.

Such observations aroused in me a special interest in the subject of security. And further study has led me to conclude: Security, the feeling, is a state of mind. Feelings of insecurity are another symptom of mental disease, common among civilized normal people.

Promising to relieve feelings of insecurity, by material means, gives temporary hope and relief, but ends up by creating bitter resentment. The recipient finally reacts as if those who promised relief had deliberately deceived him. And the bitterness of such recipients against their alleged benefactors is far greater than it is against those who never pretended to try to help them.

If this be true, the attempt to relieve the feelings of insecurity by material means may be one certain way to create future enmities. I have seen many individuals in whom such enmity had developed on this basis.

On the contrary, a very different approach seems to produce good results. So far as I can observe, the one thing that cures feelings of insecurity in individuals has been any proper, fair, legitimate means of getting them to realize that no one but themselves could solve their problems for them. Then, second, to get them to settle down and meet their own responsibilities face to face and solve them for themselves, by their own methods, as best they could.

Out of this latter approach, the individual gains in self-confidence, feels more satisfied with himself, and gains increasing feelings of security. In this new state of mind, what actually happens to him materially becomes, strange as this may sound, less important to him than the way he meets and handles it. Then—and I suspect only then—can he enjoy a sense of security in this mad, changing world in which we live.

I might add that there can never be, in this world, permanent security in the material sense. No matter how many other dangers we may escape, we must each finally die. Permanent material security will always be a myth. Only when we realize that it is a myth, can we find and enjoy feelings of security.

My remarks should not be misconstrued into a condemnation of the desire for material wealth, comfort, and such security of this sort as may be attained. I wish to imply no such thing. Gold, and all it can buy, is very nice. Lack of gold can be very unpleasant. But neither billions of dollars, nor complete poverty, nor any amount of material wealth between these two extremes can, in themselves, cure or prevent mental disease. And the usual common feelings of insecurity are manifestations of our own mental disease.

CONCLUSION

To conclude, it seems to me that the starting point, in any realistic approach to human relations is with ourselves. Our first problem is that of discovering means whereby we can live in peace, each of us with himself in his own mind and heart. This is a state of mental health.

Until this has been attained, the individual will be driven by pathological Messianic drives to make the world over to conform to his own flights from reality, fully believing in the delusion that this will make him happy.

I further believe that once we have made peace with our own natures, we will discover that we no longer infect our children with mental disease. We will no longer drive them into the inner conflicts which we now see reflected all about us. Then—and only then—will we be ready for citizenship in a better society.

THE PERSONNEL BOOKSHELF

CAUSES OF INDUSTRIAL PEACE UNDER COLLECTIVE BARGAINING: *Case Study No. 3—The Dewey and Almy Chemical Company and The International Chemical Workers Union.* By Douglas McGregor and Joseph N. Scanlon. National Planning Association, Washington, D. C., 1948. 87 pages. $1.00.

*Reviewed by James G. Parks**

This study "demonstrates the falsity of the common belief that warfare and strife between unions and management are inevitable. On the contrary, it may well be that peace and health are 'natural,' provided a few fundamental but inherently simple requirements are met," the authors say in their opening paragraph.

They have written the story of the union-management relationship at the Dewey and Almy Chemical Comany with so much insight that the narrative itself is a practical guide to any management group that is seeking the road to industrial peace.

The gradual but complete dissection of paternalism which McGregor and Scanlon accomplish is one of the outstanding features of their study. Paternalism has long been decried by union men and intuitively feared by professional managers The authors show once and for all that it is neither good business nor good industrial relations.

Sixteen pages and several appendices are devoted specifically to "Management's Contribution to a Healthy Relationship." Much of the rest of the book is filled with day-to-day details of the things the management did to bring about this relationship.

Some space is devoted to philosophies and conclusions, but the authors have devoted themselves chiefly to describing clearly and specifically what things were done and what methods were used to contribute toward a peaceful but purposeful situation.

Excerpts from the company's policy handbook, descriptions of specific offers and counter-offers, eight tables breaking down such items as grievances settled by types of issues, or discharges of union members classified by reason and indicating whether or not they were protested, are used throughout the study.

At one point, "management felt that too many grievances were being brought up and carried through to the third step, and that grievance hearings were being unnecessarily prolonged. As a result, a meet-

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NOTE: *New books on personnel management are also reviewed regularly in the Association's monthly publication,* THE MANAGEMENT REVIEW.

ing was held with the union officials." The discussion outline which management prepared for this meeting is reproduced in full.

The book presents, in addition, a penetrating inquiry into the price which management has paid for peace.

Unfortunately, far too much of the study is written from the standpoint of one sitting on management's side of the table—not, however, with a bias toward management, but rather as if the only side of the record known or available was the record management kept.

One chapter, entitled "Union Strength and Stability," does present ten pages devoted to the union's position and its problems. And, of course, elsewhere in the study the process of organization, of negotiating contracts, and the union's side of controversial subjects is described. But there is a regrettable lack of detail. Consider, for example, the following:

> When the delegation of genuine responsibility for industrial relations by top management to middle and lower management was occurring, the union faced its second crisis. Union representatives found they could no longer by-pass the line organization and take their complaints and worries to the president. They encountered a firmer, less paternalistic attitude in their dealings with management. New union policies, habits, and skills had to be developed to meet a very different set of circumstances.
>
> Again the union successfully adjusted itself to the change. . . . Grievances decreased, but there was no indication that they were being repressed. More care was taken in preparing for discussion with management. Among other things, the union executives had to learn how to prepare a written brief, since this was now required at the third step of the grievance procedure.

Here, in a description of the union's reaction to a crisis, we are again given details about a change in management policy —already dealt with at length. But for the union, we are simply told "new union policies, habits, and skills had to be developed." It would be interesting to see the outline of the talk which the business agent used in training stewards upon whom new responsibilities must have fallen. Or to have a quotation from the union president who guided it through this crisis.

This lack of detail about what went on in the union does not detract from the value of the study as a guide to a management group in conducting itself so as to promote healthy industrial relations. How interesting it would have been, however, to find here an equally clear story of how a local union has secured its ends!

The authors enumerate the causal factors which have determined the course of healthy relationships between the International Chemical Workers Union and the company and conclude that, "Perhaps the most important factor is the president of the company."

Second is "the development of skill and competence, and the full acceptance of responsibility for industrial relations by the line management organization down through the foremen." Third, "the effective communication within the management organization, and between management and the union. . . . Another factor of more than minor importance is the degree of autonomy which has been enjoyed by members of this union."

THE PROPER STUDY OF MANKIND. By STUART CHASE. Harper & Brothers, New York, 1948. 311 pages. $3.50.

*Reviewed by John M. Pfiffner**

In this book Mr. Chase makes a strong plea for two things to happen in the social sciences, the "hard core" of which embraces: (1) cultural anthropology, (2) social psychology, (3) sociology, (4) economics, and (5) political science. First, it is urged that these disciplines adopt the scientific method, which the author defines, indicating in what respects the traditional approaches of natural science must be adapted to the study of social phenomena and social data. Second, it is urged that there be greater integration and more collaborative effort between the social sciences, a breaking down of existing isolation and compartmentalism. Mr. Chase traveled far and read widely in his efforts to discover synthesis in this new area of scientific study. As one who has prowled in the same area with similar objectives, I believe that he has explored and read the significant literature.

Readers of this journal may ask how this volume contributes to management, to which one would reply that its ultimate implications are much broader than any contribution to immediate know-how. However, Chase chose the selection of pilots by the Air Force psychologists as a leading example of what social science can do for management. The several chapters on economics—which is the social science most closely allied with management in the past —are challenging, so much so that the reader steeped in classical orthodoxy may

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rebel. Like so many of us who have been impressed by the culture concept and its implications in the understanding of human behavior, Mr. Chase has plumped rather strongly for cultural anthropology.

Whether one regards this as a book in management will depend on his definition of that term. If management embraces the endeavor to utilize scientific method in the understanding of over-all and long-run problems of human behavior, then it is a stimulating contribution to understanding and declaration of faith in the future. On the other hand, a narrower limitation on management's purview will find the book less satisfying, but still rewarding.

WORKERS WANTED. By E. William Noland and E. Wight Bakke. Harper & Brothers, New York, 1949. 234 pages. $3.00.

*Reviewed by Ben F. McClancy**

It is the viewpoint of the authors of this book that if companies were more scientific in their selection of employees, happier would be the conditions in the average shop. And this is a contention with which few will quarrel. Certainly many personnel departments are no more thorough than they should be in fitting the man to the job, and certainly management should insist on maintaining definite hiring policies. But there is this to say in defense of the frequently overworked personnel man: The only time that he has the leisure to be scientific in his methods are on those occasions when he has few jobs to offer. During the war and after, companies needed men, and there were periods when the primary requisite was that the applicant be reasonably alive. Perhaps if this study had been carried out when the demand for labor was not at an all-time high, the results would have been different. That is a small point, however. For the study is a valuable one, and it focuses attention on a spot where many managements are indeed vulnerable.

Mr. Noland and Mr. Bakke have conducted an exhaustive study of hiring policies, preferences, and practices of companies in New Haven, Conn., and Charlotte, N. C. They listed the qualifications that firms wanted in potential employees, evaluated them according to their importance in these two cities, and learned that particular experience, physique, sex, and character ranked first on the list with best age, top age, color, and education following close behind.

After discovering what the employer wanted, the next step was to determine how he set about getting it. And here is where the personnel practice of the average firm bogs down. The authors learned that companies both in New Haven and Charlotte were not in the habit of using formal tests in order to determine whether the applicant for a job had what it takes. Rather they depended entirely on the good judgment of the personnel director, who in turn depended on his ability in sizing up a person from the story he told. Near Charlotte, N. C., at least not too far away, is a university called Duke at which certain experiments in extra-sensory perception are being conducted. Their tests have shown that there are people who have an almost uncanny ability at predicting a roll of the dice, or calling the turn on a deck of cards. Unless these are the folk that Charlotte companies hire for their personnel directors, Mr. Noland and Mr. Bakke are quite right in holding that the interview alone is an inadequate tool for staffing a plant with capable men and women.

This is a pioneer study in a field that is most important to management, especially now that the emphasis is on efficiency. It is an accurate reflection of human beings being human and of the result of certain forces applied to their daily lives. The research is thorough, and the presentation is lucid and informative. It is a book that will be of value to the executive responsible even indirectly for his company's employment policies.

HUMAN RELATIONS IN AN EXPANDING COMPANY. By F. L. W. Richardson, Jr., and Charles R. Walker. Yale University Labor and Management Center, New Haven, Conn., 1948. 95 pages. $1.50.

*Reviewed by E. F. L. Brech**

A warm welcome should be accorded this study, not only for its interest but also for the contribution it makes to our real knowledge of the human pattern of industry. We have almost too many textbooks on personnel management and industrial relations, and far too few factual studies that set out evi-

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* Urwick, Orr & Partners, Ltd., London.

dence in support of the textbook teachings.

This is the story of some aspects of expansion of output and a changeover in production method between 1940 and 1947 in one of the large plants of the International Business Machines Corporation. The process described has been a common characteristic of many firms in America, Britain and elsewhere in the past decade, but few are likely to have encompassed the change with as little disturbance to the pattern of human relations as in the case here portrayed—in fact, the changes appear to have contributed to the improvement of management-employee relations within the organization. A swing-over from batch production methods to continuous manufacture was the basic move that made possible a doubling of size and a greater throughput in a variety of products. This in a plant which, some years before the war, had abolished individual incentive payment methods. The investigators have given due weight to the interrelation of efficient planning and high worker morale; but, whereas they have assumed a direct cause and effect relation in the order quoted, there is also a substantial argument in favor of the converse, namely, that the better pattern of relationships contributed to the smoother working of production methods and plans. This emphasis on the sequence, however, is of less importance than the fact of the interconnection.

The greater part of the study is devoted, rightly, to the organizational changes that were directly aimed at the betterment of the human pattern. Four main steps marked the road between 1940 and 1947—though it must be remembered that the progress started obviously from a standpoint in which personnel policy and practice were much above the average. Significantly, these four steps all centered on the foreman (or "manager," as he is styled in the I.B.M. plant):

1. The levels in the structure of management and supervision were reduced.
2. Reductions were also made in the numbers of employees allotted to any one foreman's responsibility.
3. The scope of the foreman's participation in management responsibility was widened.
4. Special emphasis was placed, partly as a consequence of the preceding three steps, on increasing manager-foreman-employee contact and channels of communication; in part this was aided by giving the foreman clerical assistance as well as by removing technical guidance aside to a "staff relationship" at manager level.

These steps provided the framework for carrying into everyday practice a policy that underlined the essential human element in the foreman's responsibility—in this lies the core of IBM's endeavors and the crux of the reason for their success. In the selection of candidates, in the training procedures adopted, in the processes for imparting information, in the group discussion sessions, in the attitude of senior managers—all practice was directed to emphasizing the foreman's responsibility, not only for productive efficiency but also "*for the personal relations of his men* . . . to make him a human relations manager." The Personnel Department accordingly assumed its correct role as the functional adviser, aside from the main structure of responsibilities, but ready and available to guide and help. The investigators' comment is significantly descriptive of this major development: "The foreman combines the qualities of a supervisor with those generally associated with personnel managers. . . . His job is reminiscent of supervisory relationships in many small plants or businesses."

There are valuable lessons here; the practicing manager cannot afford to exclude this book from his shelf of professional reading.

In regard to presentation, special commendation is earned by the illustrative matter in chart form, some of which is novel in execution. It seems a pity that there is any point to criticize in so interesting a study, but this reviewer could not pass over the repetitions in the text without comment. At times they become irritating: Less than a hundred pages set too small a scene for entries and re-entries. In places the charts could have been left to speak for themselves; at any rate there is one reader who feels that the merits of this study would have been enhanced if its presentation had been limited to 60 pages by the strict exclusion of repetition.

WE HUMAN CHEMICALS. By Thomas Dreier. The Updegraff Press, Ltd., Scarsdale, New York, 1949. 122 pages. $2.00.

Reviewed by Leon Gilbert Simon

Why do some people with talent succeed while others with equal talent fail? The author raises this important question and produces the answers in the text of this highly interesting book. It is immediately evident that Thomas Dreier is a keen student of human chemistry.

Food, medicine, explosives, and poisons are among the many products of the laboratory. The chemist combines numerous elements to make materials of varying degrees

of complexity. If he were unskilled or careless, he could produce an explosion instead of food. He must therefore avoid those combinations that are violently opposed to each other by nature. The same is true of people. Whereas William James said, "We are walking bundles of habit," Thomas Dreier infers that we are bundles of human chemicals and must therefore develop a scientific skill of application to achieve the best results. We must beware lest we attempt unknowingly to mix our chemicals unwisely, with bad results. Some elements will repel each other and explode. Others will excite each other beneficially, while other combinations will be sluggish and ineffectual. The entire subject matter is most interestingly treated.

The head of a successful business enterprise is a skilled mixer of human chemicals. As a man's knowledge of human chemistry increases, his tolerance of other people's annoying habits increases. Only by careful experimentation and understanding can one become proficient in this field.

Happy marriage is also a successful chemical balance between the couple. Lack of such chemical balance makes for great unhappiness. Children in the home are not to be blamed for their chemistry. If they are bad, they probably have been badly managed. Parents must understand them as little bundles of human chemicals reacting to their natures. The skillful parent finds out what chemical reactions must be reduced and what others must be amplified. The author also discusses mothers-in-law as chemicals that might explode and offers some interesting remedies.

People who shock and upset others, as also argumentative individuals, have different chemical combinations than those who are pleasant and agreeable. The author offers an excellent discussion of the reduction of surface tension for purposes of relaxation. Surface tension can be relieved with kind words at the critical moment in conversation. The converse is also true. In a group of people who are pleasantly chatting, if someone suddenly says a disturbing thing, then tension is created where none existed. Different interests when suddenly merged together might easily explode unless someone knew how to reduce the natural tension. In friendship we generally pick and choose the kind of people we like; that is part of the chemistry of friendship. The author gives many examples of selectivity. He also suggests keeping away from people we dislike. For hate, like jealousy and envy, produces a self-poisoning reaction. They corrode our happiness. But love, understanding, and tolerance produce a warm and comfortable feeling. The author describes the president of a corporation who is possessed of chemical quietness when in conference. He shows how calmness, poise, and peace of spirit produce powerful conference reactions. Some men and women are carriers of such reactions. The author, with due modesty, says he is not in any position to prove this thesis except that it has worked successfully for him. Nevertheless, and without further proof, this book is deserving of the widest readership. Mr. Dreier is certainly to be commended for the excellence of his thesis and the fine clarity with which he presents his interesting materials.

PUBLICATIONS RECEIVED

(Please order books directly from publishers)

WOMEN'S BUREAU HANDBOOK OF FACTS ON WOMEN WORKERS. *Bulletin No.* 225. U. S. Department of Labor, 1948. For sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. 80 pages. 25 cents.

LABOR UNIONS IN CANADA: *How They Work and What They Seek.* By A. Andras. Woodsworth House Publishers, 301 Metcalfe St., Ottawa, Canada, 1948. 86 pages. 50 cents.

DIRECTORY OF LABOR UNIONS IN NEW YORK STATE. Division of Research and Statistics, State of New York Department of Labor, 80 Centre St., New York 13, N. Y., 1948. 124 pages. 75 cents.

DIRECTORY OF LABOR UNIONS IN THE UNITED STATES: *National and International Unions, State Labor Organizations.* Bureau of Labor Statistics, U. S. Department of Labor, 1948. For sale by Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. 64 pages. 20 cents.

GEARING TRAINING TO COMPETITIVE TIMES. (Proceedings of the 4th Annual Convention of the American Society of Training Directors and the 4th Annual Conference of Educational Directors in Industry of the National Association of Foremen.) National Association of Foremen, 321 West 1st Street, Dayton 2, Ohio, 1948. 106 pages.

LABOR RELATIONS & HINDRANCES TO FULL PRODUCTION. By S. L. Burk. Research Division, California Personnel Management Association, 442 Flood Building, 870 Market St., San Francisco 2, Cal., 1948. 18 pages. $1.00.

TRAINING FOR TOMORROW: *Proceedings of the Third Annual Training Conference of Educational Directors in Industry and Commerce.* Canadian Industrial Trainers' Association, 107 Craig St. West, Montreal, Quebec, Canada, 1949. 123 pages. $2.00 (gratis to non-profit organizations).

HOW INDUSTRIAL RELATIONS MEN ARE PLANNING FOR THE PERIOD AHEAD: *The Summary of an Editor's Field Check and Survey Among Pacific Coast Industrial Relations and Personnel Executives on Their Plans, Views and Experiences in Preparing to Meet the Uncertain Problems of the Future.* The Editorial Staff of The Industrial Relations Letter, 442 Flood Building, 870 Market St., San Francisco 2, Calif., 1949. 14 pages. $1.00.

HELPING STUDENTS FIND EMPLOYMENT. By Forrest H. Kirkpatrick *et al. Series VI—Student Personnel Work—No. 12,* American Council on Education Studies, 744 Jackson Place, Washington 6, D. C., 1949. 37 pages. 75 cents.

SUPERVISORY TRAINING—WHY, WHAT, HOW. *ILIR Publications, Series A, Vol. 3, No. 3,* Institute of Labor and Industrial Relations, University of Illinois, 358 Administration Building, Urbana, Ill., 1949. 24 pages. Gratis.

RECRUITMENT, SELECTION, AND INDOCTRINATION OF FEMALE CLERICAL EMPLOYEES. *Personnel and Training Series Research Project Report No. 4,* The Office Executives Association of New York, Inc., 1949. 35 pages. $2.00. Available from Miss Edith Harper, Scott Foresman & Co., 114 East 23rd St., New York 10, N. Y.

CERTIFICATION AND LICENSURE OF PSYCHOLOGISTS: INTERPROFESSIONAL CONSIDERATIONS

THE passage of a certification bill for psychology, and even more markedly the passage of a licensing bill, would affect not only psychologists, but also educators, industrialists, psychiatrists, and guidance experts with whom psychologists work. Last spring the American Psychological Association Board of Directors therefore invited these other professional groups to appoint representatives to meet with representatives of the APA in a joint discussion of certification and licensure problems. A major purpose of the conference was to consider the relationship of psychology to its professional allies in the even that certification or licensing laws are passed.

That meeting was held on June 6. It was attended by representatives of the American Association of Psychiatric Social Workers (Ethel L. Ginsburg), the American Management Association (Garret L. Bergen), the American Psychiatric Association (George E. Gardner), the National Education Association (Ralph McDonald), the National Vocational Guidance Association (George S. Speer), and the Society for the Advancement of Management (Harold A. Edgerton), as well as by two members of the Board of Directors of the APA (Helen Peak and Carroll L. Shartle). With the

exception of the American Medical Association, all the associations invited to meet with the APA accepted, and all the appointed representatives were present.

The conference agreed upon two basic principles: first, that legislation is desirable as a means of protecting the public against the unethical and inadequately trained personal and industrial counselor; second, that any legislation which is genuinely in the long-term interest of one professional group, such as psychology, will also be to the benefit of professional colleagues in related disciplines.

The meeting led to no specific decisions in the form of concrete recommendations that licensing or certification laws should contain this or that specific provision. No attempt was made to write a model bill that would be approved by the professional associations represented. On the contrary, the group quite specifically felt that the actual drafting of bills was a function of the APA and the state psychological associations rather than of the interprofessional group.

Something quite different from specific legislative provisions was accomplished by the meeting: a representative of each association, I think in all cases, learned more about the attitudes of the other associations than he had known before the conference. For example, those who had been thinking largely in terms of the licensing of clinical psychologists and of their affiliations with psychiatrists came to realize more clearly that clinical psychology is only one area of applied psychology and that legislation affecting clinical practice cannot be drawn up without considering the vocational guidance expert and the industrial psychologist. Similarly, those who had been thinking primarily of psychologists as expert counselors to industry got a clearer picture of the relation of industrial psychologists and their legal problems to the problems of the psychologist who deals with individuals in a guidance agency or clinic.

All in all, the meeting led to what I think was an extremely useful exchange of ideas which helped to educate every participant. Unanimously those who took part in the day's discussion agreed that they wanted to familiarize themselves with some of the actual bills that have been passed or proposed, discuss certification and licensing problems with their own professional colleagues, and meet again next fall. The APA will gain two things from these interprofessional discussions. First, we can draw up bills which are based upon the thinking of a somewhat wider group than our own membership. In doing that we will, at the same time, gain increased support for these bills from our colleagues in closely related professions.

—DAEL WOLFLE in *American Psychologist* 8/49

THE AMERICAN MANAGEMENT ASSOCIATION

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